AURORA VENTURES INC.

ENVIRONMENTAL MANAGEMENT PLAN

COMPANY NAME:	**AURORA VENTURES INC.**
PROJECT NAME:	**AURORA NATURE RESORT AND ORCHARD**
LOCATION:	**HUARARUNI, EAST BANK DEMERARA**
PRINCIPAL OWNERS:	**JOSEPH RAMSAYWACK & SATTIE RAMSAYWACK**
CONTACT INFORMATION:	**CELL: +1 516-633-8647** **EMAIL: joeramsaywack@gmail.com**
DATE:	**09/02/2025**

PROJECT OVERVIEW:

This project outlines the development of a luxury eco-resort dedicated to providing an exceptional guest experience while minimizing environmental impact. The resort will feature a unique, blend of premium natural rustic cabins, diverse recreational activities, such as orchard tours, bike riding, ATV trail tours, artisanal production and much more, all while ensuring a strong commitment to sustainability.

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PROJECT DETAILS

Project Type:	Resorts and Orchard
Developer/Company:	Aurora Ventures Incorporated
Contact Details:	Joseph Ramsaywack, 44B Area H, Better Hope, ECD, Guyana. Telephone: 516-633-8647, Email: joeramsaywack@gmail.com
Date Prepared:	January 9, 2025
Prepared By:	Joseph Ramsaywack, Director

GENERAL:

COMPANY:	AURORA NATURE RESORT
LOCATION ADDRESS*:*	TRACT 'D', HUARARUNI, LINDEN-SOESDYKE HIGHWAY
LOCATION SIZE:	55.43 ACRES
REQUISITE NDC:	YARROWKABRA
FACILITY USES:	ACCOMODATIONS, RESTAURANT, GARDENING, TREE PLANTING, WAREHOUSING, WATER WELL RESOURCE, VALUE ADDED WOOD PRODUCTS
SUPPORT SERVICES:	MAINTENANCE, SOLAR POWER, COOKING,

OPERATIONS:

ACTIVITIES:	Orchard, Resort, Warehouse, Solar Power, Mulch Production and Water Well,
SCALE:	Small-Medium
ANNUAL TURNOVER	$2,700,000 USD (Starting 2028)
EXPECTED LIFETIME	50-100 years
MAIN EQUIPMENT:	Generator, Loader, Excavator, Forklift, Solar – electric generation,
SUPPORT EQUIPMENT	Concrete-Mixer, Hollow-Block Making Machine, Mulching Machine, Diesel, Compressed Air Tools, Electrical Hand (Power) Tools, Construction Tools
RAW MATERIALS:	Sand, Cement, Iron Rods, Metal, Lumber, Glass, Plastic, Solar PV's, Electric Cables, Battery Energy Storage, PVC, Metal Pipes, chipped lumber
# OF EMPLOYEES:	Construction Phase – 6 Full Time, 4 Part-time Operation Phase (year 1) – 12 Full Time Operation Phase (year 2) – 22 Full Time
ELECTRICITY UTILITIES:	~ 1200 kWh/ day Consumption Rate Expected. Generation Capacity: 1350 kWh from Solar Powered System, Backup Generator will be used where necessary. Migration to national grid when available.
WATER UTILITIES:	53m³/ day water to be supplied by four (4) artesian wells, supplemented by rainwater catchment system.
WASTE UTILITIES:	~ 10 Tons/ year Organic Waste will be composted and recycled as fertilizer for plants, ~20 Tons/Year non-organic waste, managed by Waste Subcontractor. Septic waste will be managed with Leach field (drip model drainfield), and the

septic tanks will be pumped as required by a waste management company. Greywater will be accumulated and piped through the drainfield.

COMPANY OVERVIEW: AURORA VENTURES INCORPORATED

Aurora Ventures Incorporated is a Guyanese-American company founded by Joseph and Sattie Ramsaywack. Established on October 15, 2024, the company aims to revolutionize Guyana's tourism industry by developing a premier, eco-sustainable resort and orchard in Hauraruni, East Bank Demerara. Spanning 55 acres, the resort will integrate local cultural immersion, modern hospitality, and environmental responsibility.

With a strategic location near Cheddi Jagan International Airport, Aurora Ventures is positioned to attract international and local tourists. The resort will feature 45 luxury cabins, solar-powered amenities, and an immersive, all-inclusive experience that highlights Guyana's rich agricultural and cultural heritage.

The proposed project aims to develop a sustainable and eco-friendly resort that harmonizes luxury, recreation, and environmental conservation. Nestled amidst serene natural surroundings, the resort will feature rustic log cabins designed to blend seamlessly with the environment, a meandering creek, or "lazy river" that enhances the tranquility of the site, and expansive orchards that promote biodiversity and provide fresh, organic produce for guests. Key attractions include walking and biking trails that offer a unique way to explore the landscape, and designated cooking areas for immersive culinary experiences. This project emphasizes ecological preservation while offering guests a rejuvenating retreat, ensuring minimal environmental impact through sustainable practices and innovative design. Environmental sustainability is central to the project, incorporating solar power, organic composting, and responsible waste management.

Expected to open by December 30, 2027, Aurora Ventures will play a key role in Guyana's growing tourism sector, providing employment opportunities while offering an unparalleled vacation experience.

PROJECT SITE AND LAYOUT

DESCRIPTION OF THE SITE:

The site is located at Hauraruni, Linden – Soesdyke Highway, Tract D, as referenced by the following Map 1 – (Map #80794), and spans an area of 55.43 acres. The land is generally flat topographically, and is made up primarily of sand, due to the high elevation, abundant vegetation, porous soil and organic matter, the land is not typically prone to flooding. The project site is located in an area surrounded by farming lands, the Linden Highway, and natural vegetation. The site is fenced with barbed wire. Some citrus, fruit trees and coconuts were cultivated in the year 2024.

The project will occupy 55.43 acres, with 60% of the area cleared of vegetation. The vegetation will be used for construction and building purposes for various infrastructural projects throughout the resort. The remaining vegetation will be preserved, composted and mulched for planting while the rest will be replanted. Water intake systems include water from wells which will be used for the resort and orchard, and the discharge will include the natural drainage systems, septic tanks and drain fields.

Land Requirements & Layout

1. Approximately 60% of the land will be cleared to accommodate cabins, orchard plots, a warehouse, internal roads, and solar panels.
2. The remaining 40% of vegetation will be preserved, mulched, or replanted to maintain ecological balance.
3. Key infrastructure includes artesian wells, septic systems with underground drain fields, and areas for additional amenities (event center, pools, lazy river).

Receiving Waters

1. Source: Four (4) artesian wells supplemented by a rainwater catchment system.
2. Discharge: Wastewater will be treated through septic tanks and leach (drain) fields, returning filtered water safely to the soil.

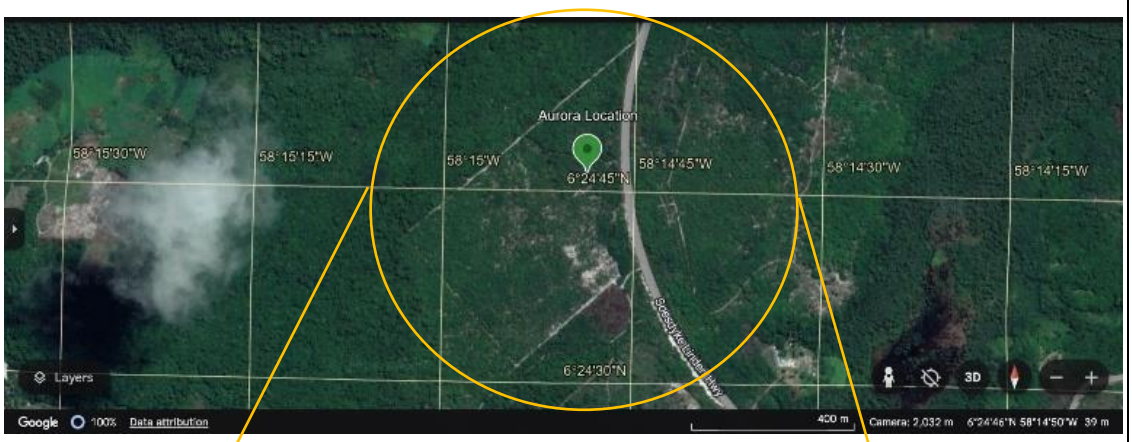
Present Land Use

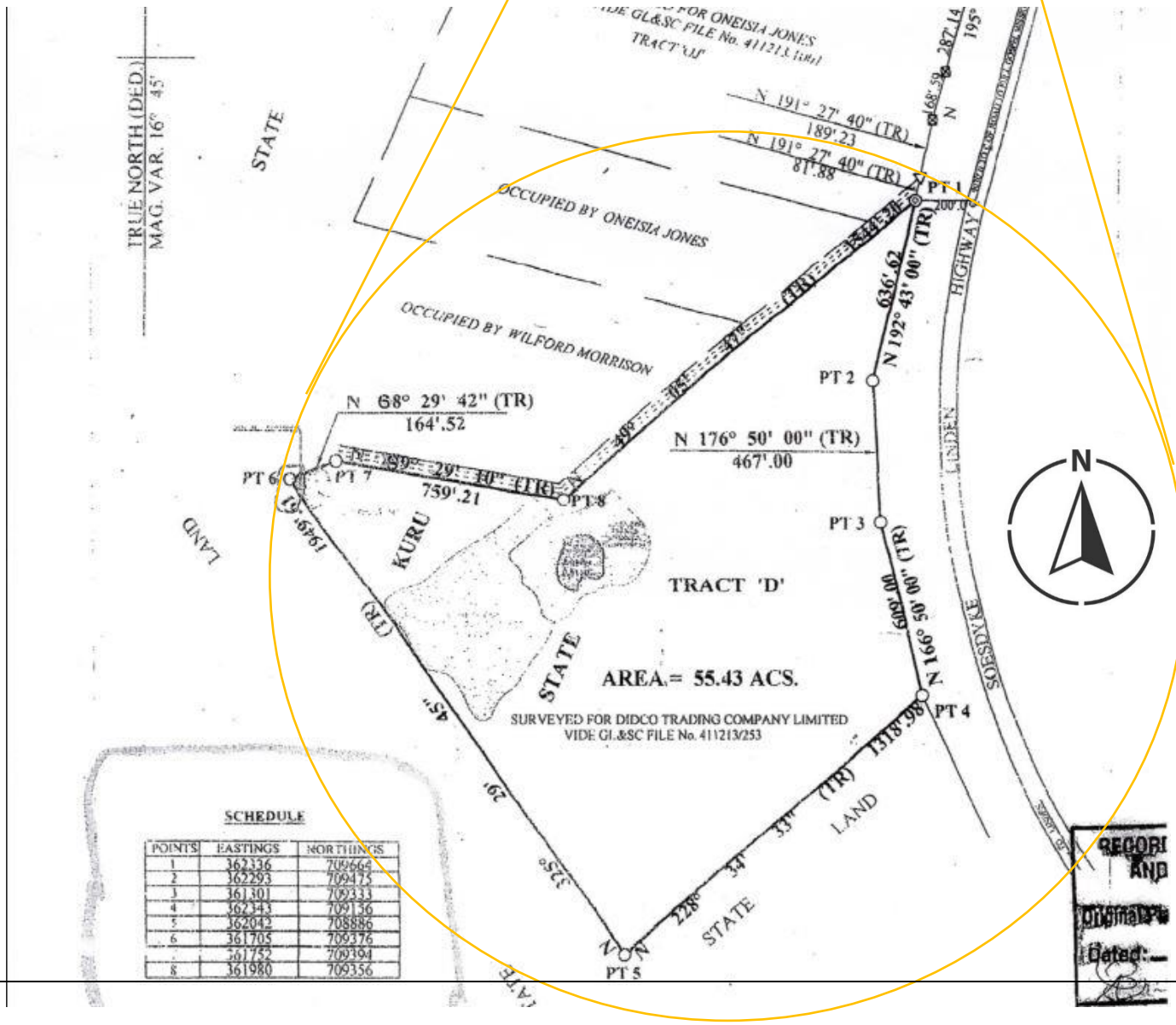
1. The parcel is currently being cultivated with a variety of fruit trees. The site is currently being prepared for Employees accommodation and equipment storage. Surrounding areas include farmland and highway frontage.

Intake & Discharge Structures

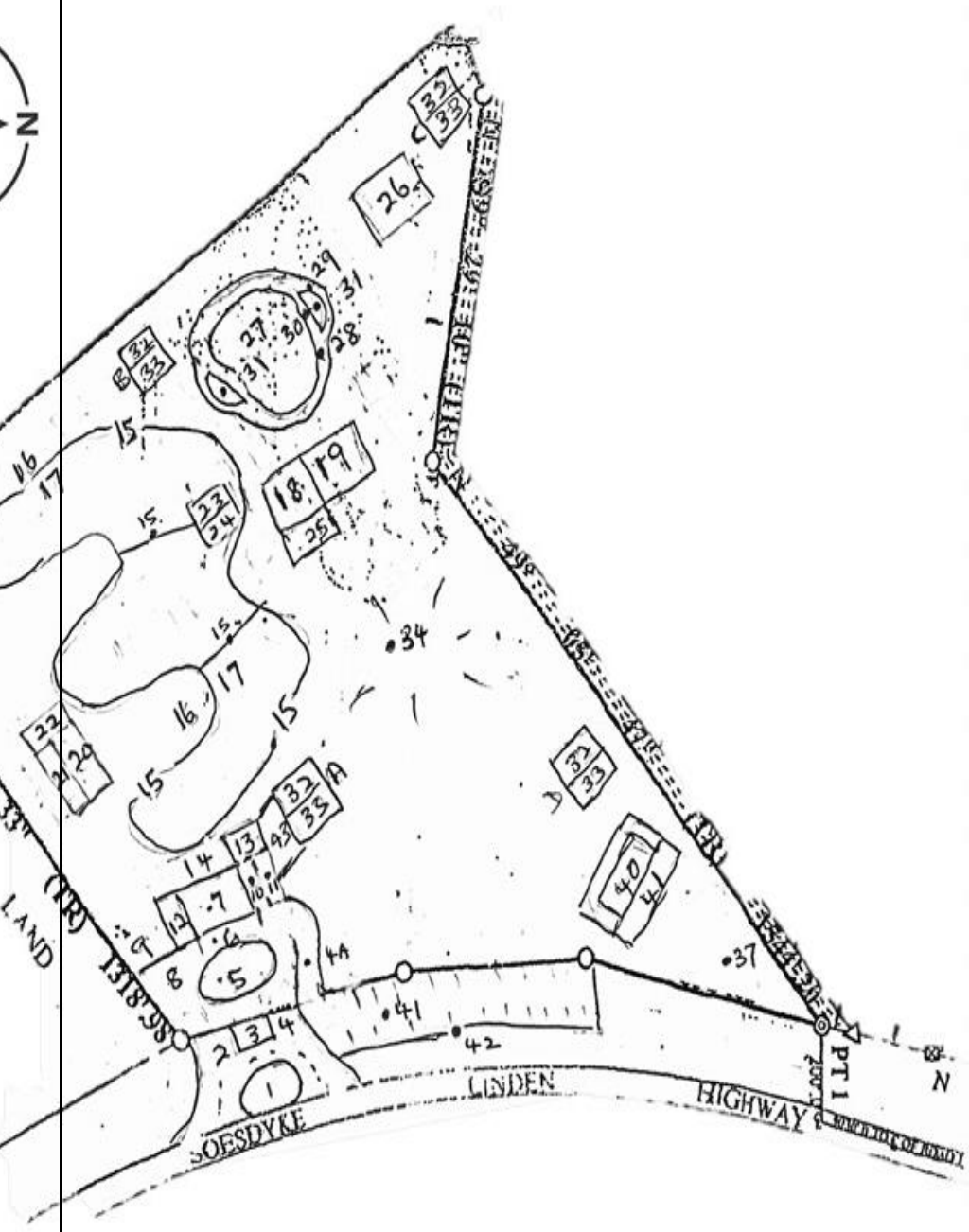
1. Artesian wells will supply an estimated 53 m³ of water per day.
2. Septic tanks and drip-style drain fields will handle effluent. Greywater will be directed to the onsite drainage system designed to prevent contamination.

MAP OF SITE:





RT AND ORCHARD FACILITY LAYOUT



KEY

#	SPECIFICATION	#	SPECIFICATION
1.	Flower Patch	22.	Washrooms
2.	Entrance – Sliding Gate	23.	
3.	Guard Hut	24.	
4.	Exit – Sliding Gate	25.	Bar and Grill
4A.	Guest Parking	26.	Event Center (Hall)
5.	Fountain	27.	Children Play Area
6.	Drop Off/ Pickup Area	28.	Lazy River
7.	Check-In Building	29.	
8.	Driver Waiting Area	30.	
9.	Shaded Waiting Area	31.	Maintenance Area
10.	Check In/ Check out	32.	Artesian Well
11.	Luggage and Storage	33.	Underground Water Tanks
12.	Snack Bar	34.	Orchard
13.	Washroom Facilities	35.	Concrete Wall
14.	Cart Pick up /Drop Off Zone	36.	Solar Panels
15.	Concrete Roadway	37.	Power Room
16.	Cabins	38.	Street Bordering Property
17.		39.	Trees
18.	Swimming Pool	40.	Warehouse
19.	Kid Swimming Pool	41.	Concrete Pad
20.	Restaurant	42.	Concrete Fence
21.	Kitchen	43.	Utility Room

TECHNICAL DESCRIPTION OF ACTIVITIES AND PROCESSES

1. Site Preparation and Land Development

The development of the resort will begin with detailed surveying and planning, using satellite imagery and topographical maps to outline boundaries and designate zones for buildings, roads, orchards, a solar farm, well water supply and drainage infrastructure. Land clearing will involve the removal of approximately 60% of existing vegetation, with all removed trees processed into lumber and mulch to be reused on-site. The remaining vegetation will be preserved or replanted to maintain ecological balance. Excavated tree roots will be mulched, and erosion control measures such as buffer zones and mulching will be implemented to maintain soil integrity. No burning of trees will occur, ensuring minimal air pollution. Perimeter security will be established with hallow block concrete fencing enclosing the property. An 800-foot chain-link fence will secure the equipment storage area. Utility infrastructure development includes the excavation of trenches for water disposal drain pipes (3"D x 2"D) and underground electrical conduits. Artesian wells equipped with shut-off valves will be drilled, providing 53m³ of water per day for construction, irrigation, and operational needs. Sustainable water extraction rates will be maintained to prevent groundwater depletion, and regular water quality testing will be conducted to prevent contamination. A septic system with an underground drip-style drain field will be installed at a depth of 5 feet, and an underground water storage tank will be constructed at a depth of 6 feet for rainwater collection and treatment.

2. Construction of Core Facilities

The project follows a structured, three-phase, four-year development plan. The first phase (2024-2026) focuses on infrastructure, initial accommodations, and an orchard. The first phase of construction will focus on laying reinforced concrete foundations for all structures using sand, cement, iron rods, and locally sourced lumber. Key facilities to be built include 15 luxury cabins, a restaurant and welcome center, a commissary, a laundry room, and a warehouse equipped with a solar panel system. Streets will be paved using repurposed concrete and cement waste to ensure sustainability. Excavation will also commence for swimming pools and a lazy river, each reaching depths of 6 feet, with water continuously circulated, filtered, and treated using eco-friendly filtration systems to minimize chemical usage and potential contamination. Phase two (2026-2027) expands amenities, including additional cabins, a spa, and a 500-person event center. The final phase (2028+) will enhance services with guided tours, recreational activities, and a transition to 100% renewable energy. The second phase will include the construction of an additional 30 cabins, an event center with a 500-person capacity, and security booths at the entrance and around the property. Landscaping efforts will focus on developing a 15-acre orchard and vegetable garden, ensuring that the project remains ecologically balanced and self-sufficient. Organic farming techniques, including integrated pest management and composting, will be implemented to prevent pesticide runoff and soil degradation.

3. Solar Energy System Deployment

Renewable energy generation will be a critical component of the resort, beginning with the installation of a 100 kW solar array on the warehouse roof. The photovoltaic system will be expanded to a total of 900 kW along the fence perimeter with the excess energy stored in battery banks for night-time operations. Further excess power will be fed back to GPL's for net metering. Backup diesel generator will be available until the full solar capacity is reached. The resort will generate approximately 1,350 kWh of renewable energy per day, surpassing its estimated daily consumption of 1,200 kWh. Solar panels will be maintained regularly to ensure maximum efficiency.

4. Resort Operations

Upon completion in 2027, the resort will offer 45 eco-friendly cabins designed for one, two, and three bedroom occupancy. Amenities will include a spa, fitness center, recreational activities such as bike and ATV riding and guided orchard tours, and an on-site restaurant serving fresh, locally grown produce. The resort will maintain a staff of 12 full-time employees initially, with plans to expand to 22 as the operation grow. All cooking facilities will utilize electric or solar stoves to reduce air pollution, and grease traps will be installed to prevent water contamination.

5. Water and Waste Management

Potable water will be sourced from artesian wells with monthly testing conducted for microbial contaminants, dangerous chemicals and heavy metals. Rainwater will be collected, stored and used for watering plants. Pools and the lazy river will have a filtration system to maintain water quality while minimizing chlorine contamination. Organic waste, estimated at 10 tons per year, will be composted and reused in the orchard, while approximately 20 tons of non-organic waste will be managed by an authorized subcontractor. A dedicated waste management program will ensure proper segregation and disposal of waste and hazardous materials. Septic waste will be periodically removed and processed through constructed leach fields to prevent overflow and contamination.

6. Environmental Protection and Compliance

To mitigate environmental impact, 40% of the land's natural vegetation will be preserved or replanted with fruit trees, vegetable gardens with buffer zones established with vegetative landscapes, wildlife and erosion control. Dust suppression techniques such as water spraying will be used during construction to minimize air pollution, and noise-reduction measures will be implemented for heavy machinery, including scheduling work during low-impact hours. Sustainable building materials and energy-efficient fixtures will be incorporated to reduce resource consumption. Chemical handling protocols will ensure the use of biodegradable cleaning agents and proper storage and disposal of hazardous substances.

7. Health and Safety Compliance

All employees will receive safety training, and daily safety briefings will be conducted. Protective equipment, fire extinguishers, and first aid kits will be readily available throughout the site. Electrical maintenance will follow strict safety protocols to minimize accumulation and improper disposal. Guest safety will be ensured through proper trail markers, signage, and supervised activities, with emergency response and evacuation measures in place.

8. Long-Term Sustainability and Growth Plans

By the third phase, 2028, the resort will transition to 100% renewable energy operations and expand its offerings to include additional recreational activities, guided tours, and enhanced retail and dining facilities. Continuous improvements in waste management, water conservation, and chemical handling will ensure long-term environmental sustainability. Marketing strategies will target locals, international eco-tourists and the North American diaspora, ensuring the resort's long-term success and sustainability.

Aurora Ventures Incorporated is dedicated to creating an environmentally responsible resort that balances sustainable tourism, luxury accommodations, and ecological preservation. By implementing renewable energy solutions, organic farming, and responsible waste management practices, the project will contribute to both economic growth and environmental conservation. Strict adherence to EPA regulations and proactive mitigation measures will ensure that the development and operation of the resort remain environmentally sound and socially responsible.

POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

#	Phase	Activity	Potential Environmental Impact	Mitigation Measures	Contingency Plans
1.	Construction	Land Clearing	Soil erosion, Loss of vegetation, Habitat disruption	Implementing soil conservation methods Replanting trees, Creation of buffer zones	Monitoring soil conditions and implementing emergency replanting if erosion accelerates
2.		Excavation & Foundation Laying	Dust emissions, Noise pollution, Habitat disturbance, Groundwater contamination	Using dust suppression methods such as soaking, Scheduling work during low-impact hours, Using sediment control barriers	Regular air testing and halt work if levels exceed standards Noise monitoring and halting operations if levels exceed standards Stop the source, notify authorities, consult experts
3.		Construction of Buildings	Waste generation, Energy use Water consumption	Implementing waste recycling programs, using energy-efficient materials, installing low water use fixtures	Emergency waste disposal agreements with licensed contractors, Complete power shut down, Rainwater catchment system and storage tanks
4.		Road and Infrastructure Development	Increased runoff, soil compaction, water contamination	Use permeable surfaces, implement proper drainage systems, and limit heavy machinery movement	Deploy additional drainage controls in case of heavy rainfall
5.	Construction/ Operations	Solar Power Installation	Land use change, visual impact, disposal of expired solar panels	Optimize placement to minimize land disturbance, use landscape integration techniques, responsible disposal of old panels	Renew Panels and safety store old ones until authorized disposal is available
6.	Operations	Resort Operations	Wastewater generation, energy consumption, solid waste	Implement solar energy use, install efficient wastewater treatment systems, and use biodegradable products	Upgrade wastewater treatment if needed, install additional renewable energy sources

7.	Operations	Orchard Operations	Pesticide runoff, soil degradation, biodiversity loss	Use organic farming techniques, implement buffer zones, and apply integrated pest management	Implement emergency runoff controls and adjust farming practices as needed
8.		Cooking Facilities	Air pollution, grease waste, fire hazards	Use electric/solar stoves, install grease traps, and conduct regular fire safety inspections	Emergency grease trap cleaning contracts, additional fire suppression systems
9.		Electrical Maintenance	Waste generation, hazardous material leaks	Use certified disposal services, implement maintenance schedules, and promote energy-efficient appliances	Maintain emergency hazardous waste containment protocols
10.		Water Filtration	Filter waste, chemical usage, potential chlorine contamination	Use eco-friendly filters, monitor chlorine levels, and ensure proper chemical storage	Emergency chlorine neutralization chemicals and water filtration adjustments
11.		Chemical Cleaning	Water pollution, health risks from exposure	Use biodegradable cleaning agents, provide proper safety training, and ensure proper disposal	Emergency spill response plan and training refreshers
12.		Waste Management	Solid and organic waste accumulation, improper disposal risks	Compost organic waste, contract licensed waste management services, and educate staff on best practices	Additional storage until disposal by authorised waste management subcontractor.
13.		Septic Management	Wastewater contamination, overflow risks	Implement underground drip leachfield/ drainfield system, ensure septic tanks are pumped as required by subcontractors	Emergency pumps and alternative wastewater treatment solutions

SUMMARY OF ENVIRONMENTAL ASSESSMENT

#	Area	Potential Impacts	Mitigation Measures
1	**Soil (Land)**	Clearing vegetation may cause soil erosion and habitat disruption. Heavy machinery can compact the soil if used extensively.	Replanting vegetation and using mulched organics for soil health, Silt fences, terracing, and buffer zones to limit erosion.
2	**Air and Noise**	Dust emissions during construction. Minor air pollution from backup generators or machinery. Construction equipment, landscaping machines, and occasional backup generator usage.	Dust suppression (wetting surfaces during construction), Scheduling heavy equipment use in off-peak hours to reduce emissions and noise.
3	**Water**	Risk of contaminating groundwater if septic systems or drilling operations are poorly managed. Increased demand on local aquifers for daily water usage.	Well-depth control and sustainable extraction rates to prevent over-pumping, Septic tanks with drip-leach fields to filter wastewater before re-entering the soil, Annual water testing (pH, turbidity, TDS, BOD, COD, microbial content) to ensure safety, storing chlorine and cleaning agents in secure, bunded areas, Using eco-friendly detergents and pesticides, Training staff in chemical safety and spill response.
4	**Waste Generation**	Organic (kitchen scraps, orchard trimmings), non-organic (plastics, packaging). Hazardous waste (chemicals, expired solar panels).	Composting organic matter, hiring licensed contractors for non-organic and hazardous waste disposal, regularly inspecting and pumping septic systems.
5	**Ecological Impact**	Possible reduction of local biodiversity through tree removal, orchard planting, and construction. Disturbances to local wildlife due to human activity.	Retaining 40% of vegetation, restoring cleared areas with native trees and shrubs, establishing buffer zones near natural drainage to protect habitats, maintaining solar arrays for peak efficiency, recycling expired panels, minimizing generator use by matching solar capacity to resort demand.

The proposed resort development project introduces potential environmental risks which require preemptive mitigation measures to ensure responsible and sustainable implementation. Land clearing and excavation are likely to lead to soil erosion, habitat disruption, and groundwater contamination, prompting the adoption of soil conservation practices (e.g., terracing and mulching) and the creation of buffer zones to safeguard sensitive habitats. Excavation schedules will be controlled to allow gradual recovery of disturbed sites, while dust suppression methods will limit airborne particles. Building construction and infrastructure development will incorporate waste recycling programs, energy-efficient materials, permeable surfaces, and well-designed drainage systems to manage runoff, conserve resources, and reduce soil compaction. Solar power systems will feature strategic panel placement that minimizes ecological impacts, landscape techniques to soften visual effects, and recycling agreements to handle expired panels responsibly. Water well drilling will follow sustainable extraction rates, controlled well depths, and ongoing water quality monitoring to avert groundwater depletion and contamination.

During resort operations, wastewater generation, energy consumption, and solid waste accumulation will be addressed through the use of solar power, efficient wastewater treatment facilities, and biodegradable products. Orchard areas will adopt organic farming techniques, buffer zones, and integrated pest management to reduce pesticide runoff and preserve biodiversity, while cooking facilities will employ electric or solar stoves, grease traps, and routine fire safety inspections to curb air pollution and fire hazards. Electrical maintenance and chemical handling will rely on certified disposal services, timely maintenance schedules, and eco-friendly cleaning agents to prevent hazardous leaks, waste buildup, and water pollution. Solid waste management will include composting to lessen landfill impact, licensed disposal services for non-recyclables, and a septic system with drip leach fields and scheduled pumping to avoid overflow and contamination. By integrating these mitigation measures at every project phase, the development team commits to environmental stewardship, supported by contingency strategies, such as: emergency replanting, additional drainage solutions, and alternative waste disposal to uphold ecological preservation and regulatory compliance, ensuring a resort that coexists harmoniously with its surroundings.

MONTHLY ENVIRONMENTAL TESTING PARAMETERS

Category	Test Name	Purpose
Air Quality	Particulate Matter (PM10, PM2.5)	Measures airborne particulate levels to assess pollution levels from construction and operations.
Water Quality	pH Level	Ensures water remains within safe pH limits for drinking and environmental balance.
Water Quality	Turbidity	Measures clarity and detect potential contamination from sediments.
Water Quality	Biochemical Oxygen Demand (BOD)	Evaluates organic pollutant levels that consume oxygen in water.
Water Quality	Chemical Oxygen Demand (COD)	Determines the number of chemical contaminants present.
Water Quality	Total Dissolved Solids (TDS)	Checks mineral content to prevent scale buildup and contamination.
Water Quality	E. coli and Coliform Bacteria	Assesses microbiological safety for drinking and recreational water.
Water Quality	Chlorine Residual	Ensures safe disinfection levels in treated water.

The business shall seek to ensure the ideal quality of air and water to ensure the safety of the guests, and the agriculture. Monitoring particulate matter (PM10, PM2.5) helps control air pollution from construction and daily activities, enhancing overall air quality. Measuring pH and turbidity offers insight into the water's chemical balance and clarity, which is vital for drinking, irrigation, and domestic uses. Evaluating biochemical oxygen demand (BOD) and chemical oxygen demand (COD) helps determine the levels of organic and chemical pollutants that could harm crops, wildlife, and guests. Checking total dissolved solids (TDS) prevents scale buildup and contamination in water systems, and testing for E. coli and coliform bacteria safeguards public health. Assessing chlorine residual verifies effective disinfection for treated water. By regularly testing these factors, a resort-orchard operation can maintain high-quality water supplies, comply with environmental regulations, protect local ecosystems, and uphold a safe experience for visitors.

NON-TECHNICAL SUMMARY

Aurora Ventures Incorporated plans to build an eco-friendly resort and orchard on 55.43 acres of land at Hauraruni, along the Linden–Soesdyke Highway in Guyana. The project will feature 45 guest cabins, a lazy river, pools, and an event center, all powered mostly by solar energy. Water will come from artesian wells, with extra rainwater collection, and wastewater will be managed through septic tanks and specially designed underground drain fields. To reduce waste, the resort will compost organic materials and contract licensed services for non-organic disposal. Just over half of the land will be cleared for buildings and infrastructure, while the rest will remain or be replanted to protect local habitats. An on-site orchard will grow fruits and vegetables for resort guests, using organic farming methods to minimize chemical use and preserve biodiversity. Key environmental safeguards include yearly water quality checks, responsible disposal of chemicals, and measures to control dust, noise, and soil erosion during construction. By focusing on renewable energy, sustainable waste handling, and thoughtful land management, Aurora Ventures aims to provide a high-quality, nature-oriented travel experience that supports both the local community and the surrounding environment.