CURRICULUM VITAE

Name: Hugh Julian Sealy

Profession: Environmental Scientist / Chemical Engineer

Date of Birth: May 7, 1962

Nationality: Barbadian / Canadian

Membership in Professional Societies & Developmental Organisations:

- Registered Professional Engineer in Barbados,
- Associate Member Institute of Chemical Engineers,
- Past-President of the Caribbean Water &Wastewater Association,
- Former Chairman of the Barbados Commission on Sustainable Development,
- Current Chairman of the Executive Board of the Clean Development Mechanism under the United Nations Framework Convention for Climate Change.
- Current Lead Negotiator for the Alliance of Small Island States on Workstream 2 of the Ad Hoc Working Group on the Durban Platform for Enhanced Action

Key Qualifications:

Dr. Sealy is the Director of the Environmental and Occupational Health Track and a Professor in the Department of Public Health and Preventive Medicine in the School of Medicine at St. George's University in Grenada with over 8 years of experience of teaching graduate students, accessing funding, supervising and conducting research and performing research and community service.

As a consultant with over 25 years of experience as a project manager, a professional engineer and an environmental scientist, he has managed numerous development projects, particularly in relation to energy, integrated solid waste management, water supply and wastewater treatment. He has conducted numerous environmental impact assessments (EIAs) and environmental studies throughout the Caribbean region.

Dr. Sealy has influenced policy and legislation related to sustainable development throughout the subregion. He assisted in the development of the national sustainable development policy for Barbados (2004) and the national energy policies for Barbados (2007), St. Lucia (2009), Dominica (2009) and Grenada (2010). He has developed coastal water quality standards and legislation for Barbados and has worked on geothermal legislation and regulations for Grenada. He has written a guidebook for the regional hotel industry to promote environmental health and hygiene. He has acted as a consultant to the Organisation of American States (OAS), the Pan American Health Organisation (PAHO), the Caribbean Environmental Health Institute (CEHI), the United Nations Development Programme (UNDP), the United Nations Industrial Development Organisation (UNIDO), the United Nations Environment Programme (UNEP) and the World Bank (WB), along with numerous government and private sector clients throughout the Caribbean.

Dr. Sealy is the former Chairman of the National Commission for Sustainable Development for the Government of Barbados. He is also a Past-President of the Caribbean Water and Wastewater Association

(CWWA). The CWWA is a regional NGO, comprised of Caribbean engineers, scientists and technicians in the fields of water, wastewater and solid waste management.

Dr. Sealy was the Director of Engineering at New Water Inc., a company established in Barbados to service the Caribbean region and promote the use of ZENON membrane filtration technology for water and wastewater treatment applications. He was the Caribbean Region Manager for a large Canadian consultancy firm (Stantec) and had oversight of several development projects throughout the region, including water supply studies in Grenada, hospital design in Tobago, solid waste management in the Bahamas and Belize and roads rehabilitation in Jamaica and Trinidad.

As a senior advisor on sustainable development to the Governments of Barbados and Grenada, and as a consultant who has worked extensively in the region, he has a thorough understanding of the functions and capacities of regional planning and regulatory institutions. This knowledge and experience ensures that project recommendations are compatible with local social, cultural and economic conditions.

Dr. Sealy is an experienced negotiator at international fora on sustainable development issues. He has represented Barbados, Grenada, and more recently Nauru (the current Chair of the Alliance of Small Island States [AOSIS]) at numerous conferences, including those under the auspices of the International Energy Agency (IEA), the International Renewable Energy Agency (IRENA), the United Nations Commission on Sustainable Development (UNCSD) and the United Nations Framework Convention on Climate Change (UNFCCC). In December 2007, 2008 and 2011, Dr. Sealy was elected as a Member of the Executive Board of the Clean Development Mechanism (CDM) under the UNFCCC.

The CDM is an international financial mechanism that expedites sustainable development projects in developing countries and assists developed countries in reaching their mitigation targets through the carbon market. An Executive Board consisting of 10 members and 10 alternates manages the CDM. Since 2005, the CDM has registered more than 7,500 projects and has facilitated the investment of approximately US\$200 billion in over 100 developing countries. Dr. Sealy served as the full member for Latin America and the Caribbean from January 2008 to January 2011. From 2009 - 2011, he acted as the Chair and Vice-Chair of the Small Scale Working Group, which is a sub-committee of the Executive Board. In this capacity, he conceptualised and implemented new rules of eligibility for micro-scale CDM projects and a CDM Development Fund (currently worth ~ US\$3M) which has made the CDM more accessible to Least Developed Countries (LDCs) and Small Island Developing States (SIDS). In December 2011, at COP 17 in Durban South Africa, Dr. Sealy was re-elected to the Executive Board of the CDM to serve as the Member for SIDS. He served as the Vice Chair of the Methodologies Panel from January 2012 to January 2013. In January 2013, Dr. Sealy was elected to serve as the Vice Chair of the CDM Executive Board. In December 2013, Dr. Sealy was re-elected for a further two-year term to serve as the Member for SIDS. In January 2014, Dr. Sealy was elected to serve as the Chair of the CDM Executive Board until January 2015.

Dr. Sealy was a member of the Grenadian delegations to the preparatory meetings (2009 - 2010) and to the first (2011), second (2012) and third (2013) sessions of the IRENA Assembly. Dr. Sealy served on the Policy and Strategy Committee of the IRENA Council from 2010 – 2012. Grenada has benefited from a Renewables Readiness Assessment (RRA), has been used as a case study in an IRENA NAMA Handbook, and has been elected to serve on the IRENA Council during the period Dr. Sealy represented the island.

Dr. Sealy served as the Energy and Sustainable Development Advisor to the Government of Grenada from October 2008 to January 2013. From 2009 - 2012, he acted as a Vice Chair of the Alliance of Small Island States (AOSIS) Climate Change Technical Negotiating Team. Dr. Sealy has been a negotiator for AOSIS on climate change mitigation and particularly the role of carbon markets since 2007. In 2013, Dr. Sealy assumed the responsibility of the Lead Negotiator for AOSIS on Workstream 2 of the Ad Working Group on the Durban Platform for Enhanced Action.

Education:

- 1993 Ph.D., Environmental Science, University of Liverpool, U.K
- 1987 M.Sc., Environmental Pollution Science, Brunel University, U.K
- 1984 B.Eng., Chemical Engineering, McGill University, Canada

Previous Teaching Experience:

Lecturer in the M.Sc. Natural Resources Management Programme. University of the West Indies (UWI). As a lecturer at UWI from 1994 - 1996, he was responsible for developing and teaching a course on Aquatic Chemistry and Toxicology and assisted with the teaching of a course on Measurement and Monitoring of Marine Resources to Masters students in the UWI Marine Resources and Environmental Management Programme (MAREMP). He also developed and delivered an on-line course on Wastewater Treatment and Management in 2005 – 2006 as part of the M.Sc. programme under the Centre for Resource Management and Environmental Studies (CERMES) and gave several guest lectures on environmental health and sustainable development issues. He was also an external examiner and developed a business model to promote the use of consultancy services as part of UWI's community outreach programme.

Selective List of Publications, Reports, Presentations and Participation in International Fora:

Sealy, H. 2014. "CDM EB Chair's Report to the CMP" Presented at the CMP10 Plenary, Lima, Peru, December 2014.

Sealy, H. 2014. "How lessons learned from the CDM can inform the design of climate finance mechanisms." Presented at the Carbon Market Watch Side event at COP20, Lima, Peru, December 2014.

Sealy, H. 2014. "How ADP Workstream 2 Can Increase Mitigation Action in the Near-term". Presented at the AOSIS Ministerial, Victoria, Seychelles, November 2014.

Sealy, H. 2014. "Ten years of the HLF. Where to from here?" Presented at the 10th High Level Forum of the Caribbean Water and Wastewater Association, Nassau, Bahamas, October 2014.

Sealy, H. 2014. "Role of the Carbon Markets in Harnessing Ambition for closing the pre-2020 Gap." Presented at the Latin American and Caribbean Carbon Forum, Bogota, Columbia, September 2014.

Sealy, H. 2014. "Opportunities in the Electricity Sector in CARICOM." Submitted as part of a peer-reviewed synthesis paper – "Tackling the Challenge of Climate Change: A Near-Term Actionable Miti-

gation Agenda." commissioned by the Republic of Nauru and presented to the UN Secretary General at the UN Climate Summit, New York, USA, September 2014

Sealy, H. 2014. "Potential Impacts of Climate Change on Tourism in the Caribbean." Presented at the CTO-CREST 3rd Executive Symposium for Innovators in Coastal Tourism. Grenada, July 2014.

Sealy, H. 2014. "Promoting CDM capacity building in a time of carbon market crisis: the efforts of the CDM Executive Board." 3rd meeting of the Durban Forum for Capacity Building, UNFCCC, Bonn, Germany, June 2014.

Sealy, H. 2014. "Nurturing demand for CERs and the CDM." Presented at the Africa Carbon Forum, Windhoek, Namibia, June 2014.

Sealy, H. 2014. "How ADP Workstream 2 Can Increase Mitigation Action in the Near-term." Presented at the CARICOM Climate Change Negotiators Coordinating Meeting, Trinidad and Tobago, May 2014.

Sealy, H. 2014. "The voluntary cancellation of CERs: How the CDM can help close the emissions gap." ADP 2.4 UNFCCC, Bonn, Germany, March 2014.

Akpinar-Elci M, Sealy H., 2013. "Climate Change and Public Health in the Small Island States and Caribbean Countries". Climate Change and Global Public Health, edited by Pinkerton K and Rom W. Springer publication. 2013, ISBN: 978-1-4614-8417-2

Sealy, H. 2013. "Carbon Markets in a future climate agreement: the road to 2020 and beyond." Presented at the 13th International Energy Agency (IEA) / International Emissions Trading Association (IETA) / Electric Power Research Institute (EPRI) Annual Workshop on Greenhouse Gas Emissions Trading, Paris, France, September 2013.

Sealy, H. 2013. "Scaling up Carbon Finance, Lessons Learned from the CDM". Presented at the Latin American and Caribbean Carbon Forum, Rio, Brazil, August 2013.

Park, J., Sealy, H., et. al., 2013 "Submission on Work Stream 2 - Implementation of all the elements of decision 1/CP.17, (b); Matters related to paragraphs 7 and 8 (ADP)". Submitted to the UNFCCC.

Sealy, H. 2013 – "Exploring a Framework for a Solar Regional NAMA for the Caribbean." Report presented to the World Bank.

Hare, W., Schaeffer, M. & Sealy, H., 2013. "Global Perspective: Science, Impacts and Challenges to Adaptation in the Caribbean". Presented at a workshop to launch the Pilot Programme on Integrated Climate Change Adaptation Strategies (ICCAS) in Grenada, funded by the German government (GIZ), April 18th, 2013, Grenada.

Sealy, H., 2013. "A Proposed Scope of the Framework for Various Approaches and Sectoral vs. Project-based Approaches for the New Market Mechanism under the UNFCCC." Presented as a discussion paper to the AOSIS Coordinator's Meeting, April 4 -5, 2013, New York, USA.

Sealy, H., 2012. "A New Developmental Framework for Grenada's Electricity Sector." Report to the Ministry of Finance and Energy, Government of Grenada.

Sealy, H., 2012. "The Relevance of Carbon Markets to the Water and Waste Sectors of the Caribbean." Proceedings of the 21st Annual Conference and Exhibition of the Caribbean Water and Wastewater Association (CWWA), Oct 4 – 8th, 2012 held in Nassau, Bahamas.

March, 2012: Chair of the Breakout Group on "Baselines under the new UNFCCC Market Mechanism". Climate Change Expert Group (CCXG) Forum, International Energy Agency (IEA) and the Organisation for Economic Cooperation and Development (OECD), Paris, France.

February, 2012: Panellist in a Webinar organised by the IEA and the OECD. The topic of the Webinar was "The Carbon Capture and Storage (CCS) Outcomes from Durban and the Next Steps Under the Clean Development Mechanism (CDM)".

October, 2011: Dr. Sealy represented St. George's University at a "Regional Workshop on Research, Development and Capacity Building at the University Level to Support Renewable Energy Development in the Caribbean" in Paramaribo, Suriname.

October, 2011: At the request of the International Energy Agency (IEA), Dr. Sealy participated in the 11th Annual Emissions Trading Workshop, Paris, France.

October, 2011: At the request of the Pan American Health Organisation (PAHO) office in Guyana, Dr. Sealy facilitated a Workshop on Impact of Climate Change on roles and functions of the Environmental Health Unit and development of PAHO-EHU work plan for 2012-2013, Georgetown, Guyana.

September, 2011: At the request of the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat, Dr. Sealy facilitated a Retreat of the Executive Board of the Clean Development Mechanism (CDM) in Quito, Ecuador

September, 2011: Dr. Sealy was requested by the UNFCCC Secretariat, to co-chair a workshop in Abu Dhabi entitled "Technical workshop on modalities and procedures for carbon dioxide capture and storage in geological formations as clean development mechanism project activities" UNFCCC Subsidiary Body for Scientific and Technological Advice

March, 2011: Seminar on MRV and Carbon Markets: A CCXG / Global Forum on Environment Event, Paris, France. Dr. Sealy was requested to facilitate the session on "Offsets, fragmented approaches and accounting."

Sealy, H.J., 2010. "An Integrated Solution to the Belle Drinking Water and West Coast Water Quality of Barbados. A Sewerless Sewage System." Proceedings of the 19th Annual Conference and Exhibition of the Caribbean Water and Wastewater Association. (Peer reviewed.)

Isada Consulting, 2010. <u>Draft Grenada National Energy Policy</u>. Prepared for the Organisation of American States and submitted to the Government of Grenada. (Lead consultant and author)

Isada Consulting, 2009. <u>Draft Dominica National Energy Policy</u>. Prepared for the Organisation of American States and submitted to the Government of the Commonwealth of Dominica. (Contributing consultant and author)

SGU & Isada Consulting, 2009. <u>A Diagnostic Study of EIA Management in the OECS – Final Report.</u> Prepared for the Organisation of Eastern Caribbean States. Funded by the Canadian International Development Agency (CIDA). (Lead consultant and author)

Sealy, H.J., 2009. "Additionality – Why so many projects fail to get registered." <u>UNFCCC CDM Regional Workshop</u>, July 20th and 21st, 2009. St. George's University, Grenada. (Invited presenter)

Sealy, H.J. *et. al.*, 2007. <u>Alternative Fuels for Diesel Engine Vehicles: Final Report</u>. Prepared for the Government of Barbados. (Lead author as chairman of the government-appointed committee)

Sealy, H.J., 2007. "The Role of Hydrogen in the Economy of a Small Island Developing State." <u>International Seminar on the Hydrogen Economy for Sustainable Development, 28 – 29 September, 2007, Reykjavik, Iceland.</u> (Invited presenter)

Ministry of Energy and the Environment, 2006. <u>Draft Barbados National Energy Policy</u>. (Lead author and chairman of the drafting committee)

Sealy, H.J., 2005. "Wastewater Reuse as a Component of a National Integrated Water Resources Management Programme for Barbados" Proceedings of the 14th Annual Conference and Exhibition of the Caribbean Water and Wastewater Association. (Peer reviewed.)

Sealy, H.J. & Hutchinson, N., 2005. <u>Integrated Approaches to Flood Management in the Caribbean. Final Report.</u> Prepared for the Global Water Partnership Caribbean (GWPC). (Contributing author as Director of Engineering, New Water Inc.)

UNEP & CEHI, 2004. A Directory of Environmentally Sound Technologies for the Integrated Management of Solid, Liquid and Hazardous Waste for SIDS in the Caribbean Region. (Contributing author as Director of Engineering, New Water Inc.)

UWI & New Water Inc., 2004. "Public Consultation on the List of Prohibited Concentrations." Public Consultation on the Marine Pollution Control Act (2004), Barbados. (Lead author and presenter of the Regulations and List of Prohibited Concentrations)

Sealy, H.J., Metcalfe, K. and Nuttall, N., 2003 "Opportunities for Sectoral Synergy in Public Sector Waste Management". UNDESA SIDS Waste Management Experts Meeting, Havana, Cuba. (Lead author and invited presenter)

Sealy, H.J., 2002. "The LBSMP – Implementation Challenges." <u>UNEP Workshop on Nutrient Removal Technology, Trinidad & Tobago</u>. (Invited presenter)

Sealy, H.J., 2001. "Inspection of Wastewater Treatment Plants: A Guide for the Central Board of Health, Ministry of Health of the Government of Antigua & Barbuda". Funded by PAHO.

PAHO, 2000. "Health & Hygiene in Hospitality; A Guide." (Lead consultant and author). 5,000 copies of this manual have been published and distributed throughout the Caribbean.

Employment Record:

January 2014 – Present: Director of the Environmental and Occupational Health (EOH) Track: Department of Public Health and Preventive Medicine, School of Medicine, St. George's University, Grenada. Dr. Sealy is responsible for coordinating the work of the faculty in the EOH track as well as managing the World Health Organisation (WHO) and the Clean Development Mechanism (CDM) Regional Collaboration Centres.

<u>July 2012 – Present: Professor:</u> Department of Public Health & Preventive Medicine, School of Medicine, St. George's University, Grenada.

<u>January 2008 - June 2012: Associate Professor:</u> Department of Public Health & Preventive Medicine, School of Medicine, St. George's University, Grenada. Dr. Sealy is responsible for the delivery of course material as part of the Master's of Public Health (MPH) programme. He is also a Research Fellow in the Windward Islands Research and Education Foundation (WINDREF) and is responsible for coordinating the Renewable Energy and Energy Efficiency (REEF) Initiative, which is a joint-venture between the Government of Grenada and WINDREF to promote renewable energy and energy efficiency projects throughout the Eastern Caribbean, with an emphasis on research on the impacts of these projects on public health.

October 2008 – January 2013: Energy and Sustainable Development Advisor: Government of Grenada. Dr. Sealy was responsible for developing Grenada's national energy policy, which was approved by the Cabinet of Grenada in March 2011. Dr. Sealy had responsibility for implementing this policy and the 2010 – 2020 Sustainable Energy Action Plan. Key elements of the ten-year Action Plan included the enactment and enforcement of energy efficiency legislation, the construction of two (10 MW each) geothermal plants on mainland Grenada, a 1.1 MW wind farm in Carriacou and solar PV units throughout the tri-island State. Nationally Appropriate Mitigation Actions (NAMAs) were to be developed and registered with the UNFCCC.

Responsibilities and tasks performed as the Energy Advisor to the Government of Grenada (GoG) included:

- Mobilised over EC\$13.7 million in grant and concessionary financing for the energy sector.
- Prepared the energy section of the GoG's annual budgets
- Member of the GOG's negotiating team on the purchase of the electric utility.
- Developed and prepared "A New Development Framework for the Electricity Sector of Grenada." This document paves the way to break the current monopoly on electricity generation.
- Assisted in the drafting of a "Geothermal Resources Development Bill"
- Assisted in the development of a Memorandum of Understanding with the Clinton Foundation to provide assistance to the GoG in its strategic negotiations with the private sector on energy issues.
- Member of the Regional Energy Committee with responsibility for overseeing the development of the Eastern Caribbean Energy Regulatory Authority under a World Bankfunded project.

- Assisted in obtaining climate change adaptation/mitigation assistance from China.
- Responsible for and participated in the use of Grenada as a case study in the recently published (IRENA 2012): <u>IRENA Handbook on Renewable Energy Nationally Appropriate</u>
 <u>Mitigation Actions</u> (NAMAs).
- Responsible for and participated in the use of Grenada in a Renewables Readiness Assessment (RRA) conducted by consultants on behalf of IRENA (February December, 2012)
- Conceptualised GREENADA VISION 2030, which is the GOG's goal to convert Grenada to the 100% use of renewable energy for electricity generation and for transport by 2030.
 GREENADA VISION 2030 was launched at the Rio+20 Conference (March April, 2012)
- Prepared a new interconnection policy for distributed generation using solar photovoltaics.
- Assisted in the drafting of an Energy Cooperation Agreement with the Government of Trinidad and Tobago (GoTT).

April 2006 – Present: – Private Consultant

Consultant for the development of an AOSIS Climate Change Negotiators' Training Manual. Client: UNDP.

Consultant for the design of a regional Nationally Appropriate Mitigation Action (NAMA) framework (utilising solar photovoltaic technology) for the Caribbean. Client: World Bank.

Consultant to the Caribbean Solar Finance Programme (2011) to determine the potential for solar and biogas technologies in small and medium enterprises in Grenada. Client: UNIDO

Consultant for the preparation of Sustainable Energy Policies for Dominica & Grenada. Client: OAS.

Sub-consultant for a review of the 2009 draft St. Lucia Energy Policy. Private Client – St. Lucia

Consultant for an Environmental Impact Assessment of a proposed 1,500 condominiums complex in St. Lucy, Barbados. Private Client – Barbados

Consultant for the preparation of a waste chemical management programme for Barbados; Private Client – Barbados

Consultant for an Environmental Impact Statement for use of tyre-derived-fuel in a cement kiln; Private Client – Barbados

Consultant for an Environmental and Social Impact Assessment of a Multi-purpose Sugar Processing Facility; Government of Barbados

Environmental Scoping Study and Preliminary Engineering Analysis of the sewerage system proposed for a commercial development; Private Client – St. Vincent & the Grenadines

Redesign of the wastewater treatment system for the Portvale Sugar Factory; Government of Barbados Consultant for a Strategic Environmental Assessment of the National Energy Policy; Government of Barbados

Consultant for the preparation of a National Energy Policy; Government of Barbados

Consultant for a Prevalence Study to determine the cause of ill health amongst students and staff at a secondary school; Government of Barbados

Consultant for case studies on Integrated Flood Management in Barbados, Guyana and Trinidad & Tobago; Global Water Partnership – Caribbean

2004 – 2006: New Water Inc. / Director of Engineering

Responsible for the services provided by New Water Inc including the marketing of ZENON membrane filtration technology for water and wastewater treatment throughout the Caribbean.

2000-2003: Stantec Consulting International Ltd. / Caribbean Region Manager

Barbados Water Authority: Project Principal for an Environmental Assessment to determine the least cost alternative to protect a limestone aquifer (the Belle), which provides approximately 40% of Barbados' drinking water.

Consultant for an Environmental Impact Assessment of a proposed 18-hole golf course at Lancaster, St. James, Private Client, Barbados.

Consultant for the solid and liquid waste management component of a Gullies Ecosystem Study; Government of Barbados

Sub-consultant for an environmental impact assessment for the reform and expansion of the Port of Bridgetown; Government of Barbados

Pan American Health Organisation (PAHO): Consultant for the development of a Wastewater Treatment Plant Inspection Manual for the Environmental Health Department of the Government of Antigua & Barbuda.

Project Director for the Implementation Assistance Project for the Marine Pollution Control Act. This included the development of national effluent discharge and ambient water quality standards. Government of Barbados:

Project Principal for a Distribution Network Assessment and Project Prioritization Study for the Water and Sewerage Company (WASCO) in St. Lucia. Project Report to be used by the Caribbean Development Bank and the World Bank to determine funding allocations to WASCO for the period 2000 – 2003. WASCO, Government of St. Lucia

Project Coordinator for a US\$35 million design/build proposal for a new wastewater treatment and disposal facility for the city of Port of Spain, Trinidad and Tobago. WASA, Government of Trinidad & Tobago:

1998 - 2001 Private Consultant:

Consultant for an Environmental Impact Assessment as a requirement for planning permission to construct a concrete block manufacturing plant in Barbados. Client: Robar Technologies Inc.

Sub-consultant for an environmental impact assessment for the reform and expansion of the Port of Bridgetown. Client: Government of Barbados.

Consultant for the development of a Wastewater Treatment Plant Inspection Manual for the Environmental Health Department of the Government of Antigua & Barbuda. Client: PAHO.

Consultant for an environmental impact assessment as a requirement for planning permission to extend an existing limestone quarry and to develop a new limestone quarry in Barbados. Client: C.O. Williams Construction Ltd.

Consultant for the design of a remediation plan for a hydrocarbon-contaminated site in Barbados. The objective being the conversion of approximately 1 hectare of land previously contaminated by an oil refinery and terminal into land suitable for hotel and commercial development. Client: Mango Bay Resorts Ltd.

Consultant for an Institutional Strengthening Study of the Department of Environmental Health Services, Government of the Commonwealth of the Bahamas. Client: PAHO.

Consultant to the Pan American Health Organisation (PAHO); provision of assistance in an assessment of on-site disposal practices of wastewater in St. Vincent and the Grenadines and assistance in the development of training programmes. Client: PAHO. St. Vincent & the Grenadines.

Lead consultant on an environmental impact assessment of a proposed 7500m3/day seawater reverse osmosis (SWRO) plant for the Sandy Lane Resort complex in Barbados. Client: Sandy Lane Hotel.

Lead consultant on an environmental impact assessment of proposed chemical usage on 45 holes of golf at the Sandy Lane Resort complex in Barbados. Client: Sandy Lane Hotel.

Co-consultant on a report to the Inter-American Development Bank, requesting additional funding for the South Coast Sewerage Project. Client: Government of Barbados.

Sub-consultant on an EIA for the expansion of the Ocean Terrace Inn in St. Kitts. Client: OTI. St. Kitts & Nevis.

Lead Consultant for the preparation of "Health & Hygiene in the Hospitality Sector. A Guide" with advice on appropriate environmental health practices for the hotel sector in the Caribbean. Approximately 5,000 copies of this guidebook have been published and are being distributed by Caribbean Action for Sustainable Tourism (CAST). Client: PAHO.

Sub-consultant on an EIA for a 4 IMGD brackish water reverse osmosis desalination plant. Client: Barbados Water Authority.

Sub-consultant on an Environmental Evaluation of a proposal to construct a single sugar factory with cogeneration (utilising 120 tonnes/day of MSW as fuel) to replace the existing three sugar factories in Barbados. Client: Barbados Agricultural Management Company.

Sub-consultant on a six-month site remediation study to determine the extent of hydrocarbon contamination around an oil refinery in Barbados. Client: Government of Barbados

1994 -1997 Government of Barbados/Project Director for South Coast & West Coast Sewerage Projects and the Integrated Solid Waste Management Programme.

Member of the Cabinet-appointed National Commission on Sustainable Development, which advised the Government of Barbados on sustainable development issues

Member of the Cabinet-appointed National Negotiating Committee to advise the Government of Barbados on the construction of a new petroleum products terminal facility to service the country's fuel requirements for the next twenty years.

While with the Government of Barbados, Dr. Sealy was responsible for three on-going national projects with a combined capital value of approximately US\$250 million. These included:

Integrated Solid Waste Management Programme: This project consisted of a US\$2.5 million Feasibility and Final Design Study, and a US\$25 million Capital Works Programme. The objectives of the study were to develop a comprehensive twenty-five year solid waste management plan for Barbados.

Construction of a sewerage system along the South Coast of Barbados. The system consisted of 44km.of sewers, 4 lift stations, a 9.7 ML/day primary treatment plant, with ozone odour control and a 1.1 km. marine outfall. Five kms of sewers were laid using 'no-dig' technology. The US\$80 million project was funded by the Inter-American Development Bank (IDB), the European Investment Bank, (EIB), and the Government of Barbados. The project included a two-year Operational Assistance Programme to the

national agency with responsibility for operating the system and a comprehensive Environmental Monitoring Programme of the reefs and near shore waters along the entire south coast of the island.

Master Plan and Final Designs - West Coast Sewerage Project: This US\$3.2 million study includes an Environmental Impact Assessment of the design alternatives, evaluation of wastewater re-use, treatment and disposal options, an Institutional Strengthening Study, and preparation of Final Designs for the preferred option. Extensive oceanographic investigations, water quality data collection, and statistical analysis of 'baseline' water quality with computer modelling of the flux of pollutants into the near shore along the west coast of the island were conducted. The capital cost of the programme is estimated at US\$154 million.

1994- 1996 Adjunct Lecturer at the UWI, Cave Hill Campus, Barbados

1989 - 1993 University of Liverpool/Research Associate. Researched the use of hydrogels as carrier agents for agrochemicals. Developed a laboratory protocol for the analysis of PCBs in fish muscle.

<u>1984 - 1986</u> <u>Intel (Bdos) Ltd./ Environmental Engineer</u>. Responsible for the general safety of staff (1100 employees), the general public and protection of the environment.

Awards:

Recipient of a Barbados Scholarship – 1980 Recipient of a Commonwealth Scholarship – 1986

Languages Speaking Reading Writing

English Excellent Excellent Excellent

References:

Professor Wayne Hunte, Pro Vice Chancellor, University of the West Indies, Cave Hill Campus, Barbados.

Dr. Leonard Nurse, Centre for Resource Management and Environmental Sciences (CERMES), University of the West Indies, Cave Hill Campus, Barbados.

I, the undersigned, certify that to the best of my knowledge and belief, these biodata correctly describe me, my qualifications and my experience.

Date: January 27th, 2015