Final Report

Legislative Policy Brief
on
Food Safety, Water Quality and Environmental Health

ANGUILLA

for

Pan American Health Organisation (PAHO)

Prepared by:
Judy Daniel Julien
E-mail: judyjul1@aol.com

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A. Background, Objectives, Scope

Summary

This section describes the background to the project, identifies its objectives and explains its scope.

Background

Public health legislation in the Caribbean has become outdated and irrelevant in many ways to the needs of a modern developing society. The results of environmental studies in the Caribbean community indicate that their legislative framework for environmental health has received little attention in recent times. Except for the Litter Act, which was enacted in these countries around the early 1980’s, the most comprehensive environmental health legislation dates back to their Public Health Act, which is itself in need of general revision.

This weak legislative framework for environmental health has severely constrained the activities of Public Health/Environmental Health Departments in the discharge of their responsibilities. As such, the ability of countries to tackle pollution and environmental health problems is greatly restrained by a lack of resources, as pollution control and health protection measures have often not kept pace with economic development.

The regulatory framework is equally weak and does not include provisions for standard-setting, monitoring and the establishment of modern criteria that promote food safety and water quality.

The relatively new approach to the prevention and control of food-borne diseases is the hazard analysis critical control point (HACCAP) system. This system seeks to identify hazards associated with any stage of food production, processing or preparation, assess the related risks and determine the operations where control procedures will be effective. The system places emphasis on assessing hazards and risks and identifying critical control points, rather than on control criteria and monitoring procedures. The implementation of HACCAP hazard measures is therefore placed on educating people who prepare and store foods.

The threats to human health associated with poor drinking-water quality were critically assessed by WHO in its Guidelines for Drinking Water Quality, 1985. Of particular concern and addressed in the report, is the fact that there is increasing evidence that drinking water sources are being contaminated and that a natural resource, vital to health and development is being threatened.

At the 1992 UNCED, States were requested to develop national sustainable development plans; and the World Health Organisation (WHO) and by extension PAHO proposed to assist countries with the health and environment component of such plans. Chapter 6 of Agenda 21 states that health and development are intimately connected and has identified activities aimed at “reducing health risks from environmental pollution and hazards” as a priority programme area to be co-ordinated by the WHO or achieving the goal of sustainable development.

Furthermore the recent analysis of WHO has clearly established the interdependence among the factors of health, environment and development and has revealed that most countries are lacking such integration as would lead to an effective environmental health programme.

**Objectives and Scope**

The Pan American Health Organisation has commissioned the present study. Its main objective is to review the legal framework for food safety and water quality in selected Caribbean countries and to identify the areas, which require improvements in this framework. The central objective of this study is to provide Anguilla with the opportunity to advance its efforts to modernise its legislative instruments for the practices of environmental health in the area of food safety and water quality/wastewater management.

**B. Terms of Reference and Methodology**

*Summary:*

*This section of the Report describes the terms of reference, which guided the study, and the methodology that was implemented in its conduct.*

**Terms of Reference**

In accordance with Contractual Services Agreement, the Consultant was required to carry out the specific activities as follows -

(a) Develop strategy and work plan for reviewing environmental health legislation or components of same in each of the countries.
(b) Visit Barbados and hold a meeting with Environmental Health Technical Officers and the Programme Officer Eastern Caribbean (POEC) to discuss plans and compile relevant background documents at CPC.

(c) In consultation with Technical Officers of PAHO, draw up an action plan, which would contain a schedule of the visits and activities to be carried out in the project countries.

(d) Obtain consensus from the nationals on the scope of change or adaptation to other models through facilitating technical consultations, workshops or other gatherings as judged appropriate.

(e) Prepare legislative brief outlining specific aspects of the legal framework in the Environmental Health components as indicated below:

- Anguilla and BVI - Food legislation and water quality
- Dominica - Food Safety and water quality
- Grenada - Environmental Health legislation, food safety and water quality
- St Kitts and Nevis - Food safety and water quality

(f) Provide PAHO CPC officials with mid-term and final reports indicating status of activities, achievement and constraints.

**Methodology**

The methodology employed took into account a multi-sectoral approach involving consultations with the public sector and private where possible and the promotion of inter-agency collaboration. Agencies that were constituted in the preparation of this report included Ministries of Health, Environment, Bureau of Standards and Water Authorities. This consultancy sought to highlight inter alia, the collaboration possibilities that already did or could exist between and among sectors and institutions with regard to the environmental health framework.

The selected CARICOM - CEHI countries were Anguilla, British Virgin Islands, Dominica, Grenada and St. Kitts. Generally the institutions and national co-ordinator were identified by PAHO. The Consultant also extended the consultations to other agencies as were considered useful to the study. A Summary of Regional Conclusions is at Appendix I.

In accordance with the Terms of Reference, fact-finding missions were conducted to Anguilla to develop a plan to action for the implementation and enforcement of a revised

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1 On request from the Environmental Health Officials in Dominica requested that the scope of the Legal Consultant’s work was extended to also include water quality. CAP. 194 No. 10 of 1976
2 On request from the Environmental Health Officials in Grenada requested that the scope of the Legal Consultant’s work was extended to also include water quality.
3 On request from the Environmental Health Officials in St. Kitts and Nevis the scope of the Legal Consultant’s work was extended to also include water quality
legal framework for food safety and water quality/waste water management within the context of environmental health. A list of persons/organisations that were consulted is at Appendix II. The existing institutional capacity, technical capability and institutional strengthening needs of the selected countries with regard to implementing and enforcing the standard were also considered. The visit was co-ordinated by PAHO and national counterpart Dr. Jeremy Parr.

A draft was submitted as the basic working document for a Stakeholder Workshop, which was held in Anguilla on 29 February, 2000. The results of the Workshop forms part of this final report and outlines the agreed national priorities for legislative review and incorporates a legislative policy brief that may be presented by executives to the Cabinet for agreement on the preparation of national legislation in the areas of environmental health, water quality and food safety. The legislative policy brief is at Appendix III.

The Consultant extends her appreciation to the national counterparts for his support in organising the visits to Anguilla and for the hospitality of all persons that were interviewed. These visits were successfully conducted and served the objective of heightening and promoting awareness of the need for improvements in the legislative framework for environmental health generally and specifically for food safety and water quality.
C. COUNTRY REPORT

Summary: This section of the report describes the legislative and policy framework for food safety and water quality within each of the study areas. It represents the views of the persons interviewed in each study and presents a work plan for effecting the recommended changes.

Anguilla

General

Anguilla is a tourism-oriented dependency of the United Kingdom. The major industry and employer is tourism. Fishing also makes a significant contribution to the economy. Agriculture is minimal and most foodstuffs, including fresh produce, are imported.

The island’s population is rising quickly as the rapid economic development has resulted in significant intra-Caribbean migration. Given the development thrust in the tourism sector, one of the environmental problems facing Anguilla is pollution from land-based and marine sources. The rapid, but fragile, economic development and the social and demographic growth of the island is putting potential strains on the environment and increasing the risk of public health concerns.

Food Safety

Generally there is a near absence of adequate enforcement provisions for food handling and safety in Anguilla. The principal enactment, the Public Health Act of 1969 has empowered the Minister at section 10 to make regulations with the approval of Cabinet with respect, inter alia, to measures to be taken for the protection of the public health with respect to the production, preparation, manufacture, storage, distribution and sale of food intended for human consumption. Such measures include for the purposes of this study –

(a) the licensing and inspection of shops, restaurants and other eating establishments, including hotels and all other buildings or premises where any food, cooked or uncooked, is sold or prepared for sale, whether to be consumed on such premises or to be taken therefrom for the purpose of human consumption, manufactured, prepared, packed, handled or stored;

(b) the location, construction, furnishing and equipment, cleanliness and maintenance of any building or premises or other place in which any article of food is manufactured, prepared, handled, stored or sold …and in particular…;
(i) bakeries, bakeshops and bread shops;
(ii) meat and butcher shops;
(iii) dairies and milk shops; and
(iv) street vending of foods.

(c) the licensing and inspection of premises where any article of food is manufactured, prepared, packed, handled, stored or sold; the labeling and packaging of foods, the seizure, forfeiture and destruction of any food, the standards of identity and purity; and

(d) the conditions under which food may be imported into the State and any exemptions from the provisions of the Act.

Not all of these regulations have been enacted under the Act however; nor does the existing regulatory framework incorporate modern technologies such as the Hazard Analysis Critical Control Point Evaluations (HACCP) for detection of the contamination of food – a situation that is consistent in the other project countries of BVI, Dominica, Grenada and St. Kitts.

The **Public Health (Food Hygiene) Regulations**, No 7 of 1978 enacts the major requirements of the Codex Alimentarius standard however. The reliance on the general inspection techniques embraced in the Codex standard over the HACCP system seems to be due to the complexity of the HACCP system itself and the unavailability of the necessary financial resources to implement its requirements, particularly with regard to training and laboratory capability for the testing of food samples. It appears that the likely approach that would be adopted by Anguilla would be to implement selected elements of the HACCP system, in accordance with their capabilities.

The emergence of mobile food caterers is the cause for much concern by environmental health authorities in Anguilla and indeed all such authorities in the project countries. The scope of the existing **Food Regulations of 1953** which addresses food handling on a temporary basis is largely inadequate for remedying this now significant problem.

In general the existing food safety regulations are in need of revision to establish firstly, a comprehensive legislative framework for its management and importantly to incorporate adequate powers for the environmental health officers to respond. Specific improvements to the existing regulations would therefore include, the power to close, enter and condemn food, the categorisation of food establishments so that licence fees can be differentiated and the issuing of temporary food operating licences for a small fee. At present a general licence fee is payable by all kinds of food establishments. The inspection of meats at the port, before delivery to merchants is also recommended. The presence of environmental health officers at ports of entry together with the vesting of related powers of inspection in law will be required to give effect to this.
Drinking Water Quality

Anguillans rely largely for their domestic water supplies on the collection of rainwater from roofs and storage in domestic cisterns and on the abstraction of groundwater. It is a building regulation that each house has a cistern located above or below ground level. Cisterns are usually under the house, though some are built adjacent to the house.

As a result of the karst topography, there are pockets of groundwater and one major lens in the Valley area, but this water is brackish and generally considered not fit to drink. In addition the groundwater yield is not sufficient to meet the long-term needs of the island. A shortage of water has made drinking water quality a pressing issue for Anguilla.

There are four private water trucking water companies that supply desalinated groundwater through truck delivery. Many householders buy water from these companies when their cistern water runs out. In addition, there is a public water distribution network, and it is estimated that half of the households have a connection to the public supply.

The source of water in the piped distribution network is obtained from a newly commissioned desalination plant. Virtually no householder chlorinates his cistern water as such; none of it is considered to be “safe” drinking water. Because of uncertainties over the quality of water many householders rely on bottled water for drinking purposes. Approval has recently been obtained for a local company to commence bottled water production in the country. Currently there are no controls on the use of bottled water or water truck delivery services. A proposal has been made for the establishment of an independent certification of bottled water sources on a regional basis.

The principal water legislation is the Watercourses and Waterworks Ordinance (Cap 185 of 1956) and the Watercourses and Waterworks Regulations. This legislation establishes a Water Board with regulatory powers to, among other things, regulate the supply of water to consumers, prevent waste, misuse and pollution of water and control sanitation of watersheds. Substantively, the legislation addresses issues of water supply and protection of watercourses. “Watercourses” is defined to mean any pond, spring, stream or part thereof vested in the Crown or declared subject to the Ordinance. The Water Department of the Ministry of Infrastructure, Communications and Utilities is responsible for administration of the Ordinance. Although the Department is under a legal obligation to monitor the quality of the water it supplies to ensure a wholesome quality, it is unable to do so due to the unavailability of adequate resources.

The legislation makes it an offence to put any rubbish or offensive solid or liquid matter into a watercourse, or to pollute water flowing into or out of a watercourse. Regulations provide details on water supply, water meters and the control of standpipes.

Public health officials also discharge responsibilities in respect of the maintaining of drinking water quality. Under the Public Health Ordinance\(^4\) the Minister having

\(^4\) Idem
responsibility for health \(^5\) is authorised to make regulations for the protection of water from contamination and pollution including –

(a) the inspection and approval of sources of supply, and the conditions, if any, on which such approval is granted;

\((b)\) the testing and analysis of water;

\((c)\) the construction, alteration, maintenance and purification of water supplies and water distribution systems;

\((d)\) the supervision and control of any river, spring or part thereof contributing to a public water supply;

\((e)\) the regulation of persons bathing, washing clothes, cleaning vehicles, utensils or animals at or in any river, stream or spring or part thereof contributing to a public water supply; and

\((f)\) prescribing the limit or purpose for which water may be used and distributed.

This power to make regulations for the protection of water from contamination and pollution was exercised by the Minister through the passage of the Public Health (Nuisance) Regulations 1981 \(^6\).

Accordingly, under these regulations -

(a) Any pool, ditch, pond, gully, gutter, watercourse, cistern, tank, well or other receptacle for collection or means of storing water or water supply;

(viii) (1) Any absence from any premises –

(a) of a sufficient and properly constructed and protected water supply, water fittings, means of storing water; or

(b) of sufficient and properly constructed and protected catchment area and appurtenances or means of collecting water.

(2) Any waterworks, or water supply, or means of storing, conducting, collecting, pumping, or hauling water, which is not maintained in a sanitary condition;

(3) Any water-tap, pipe or pump or other means of obtaining water under which water is allowed to accumulate or become stagnant;

\(^5\) presently the Minister of Social Services

\(^6\) No. 11 of 1981
(4) Any house not sufficiently supplied with fresh water, regard being had in every case to the nature thereof, the number of persons occupying, inhabiting or using the same and the means of supply thereto;

(5) Any tank, cistern, reservoir for water or other water supply, whether public or private, used for domestic purposes, the water wherein shall be a nuisance, or the use whereof for domestic purposes would be injurious to health;

(6) Any collecting area, filter, gutter or pipe, whether public or private, for the collecting, purifying, or conveying water for domestic purposes, which shall be in such a state or condition that the water collected thereby or passing over or through the same would be a nuisance or the use wherefor domestic purposes would be injurious to health;

so foul or in such a state or so placed or made or left as to be unsanitary, nuisance, or injurious or dangerous to health or likely to become so; are considered to be nuisances which are actionable in law.

The effective enforcement of the legislation requires the availability of adequate laboratory facilities for the conduct of sampling and analysis of water resources. Prior to 1997 there was no routine water quality monitoring (WQM) in Anguilla. Due to the rapid development of the island, and the significant changes in water supply and sanitation status, it was recognised that this was an area that needed improvement.

The Water Laboratory (WL) of the Primary Health Care Department of the Ministry was established in late 1997 and is responsible for the monitoring of the quality of all water resources. The main functions of the WL are:

- To routinely monitor water quality in order to find sources of pollution and avoid long-term problems;

- To promote healthy water quality protection.

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7 in accordance with section 10 (8) of the Public Health Ordinance.
As a result the WL is involved in a wide range of activities which include the monitoring of drinking, waste, coastal and groundwater sources to control any immediate water quality problems and provide long-term data for decision-making; providing information and advice to the public; issuing public announcements and responding to complaints. This is a large responsibility given the existing staff, laboratory and legislative limitations.

The WL together with the Water Department is in the process of determining the system that may be appropriate for monitoring water quality. It has been proposed that WHO standards be adopted for drinking water and the Eastern Caribbean (EC) standards for discharges. The WL has also established a Water Committee which reviews the work programmes of the WL which, in terms of the regulatory framework has recommended that regulations be enacted to introduce standards for discharges from waste water plants, hotels, government departments and from pleasure craft.

With the limited staff membership at the Environmental Health Section consideration is being given to the vesting of enforcement powers specific to the maintaining of water quality including the supervision and control of any river, spring, stream or part thereof contributing to a public water supply, in the office of the Laboratory Technologist. This office presently conducts water-sampling and monitoring activities at identified locations and acts on complaints regarding water pollution. An amendment to the Public Health Act will be required to give effect to this.

The advent of a piped potable supply for the first time, and the position of the WL having amassed a degree of background data and an experience of the issues, means that Anguilla is now in a position to impose realistic water quality standards. Without supporting regulations, these standards will take on the status of recommended achievable targets only, thereby placing limits on enforcement. There is also a proposal for cost recovery through the introduction of a water analysis fee.

**Wastewater Management**

Waste management is governed primarily by the *Public Health Act, 1969 (No. 22 of 1969)*. This Act is administered directly by the Ministry of Social Services. Under this Act, the Minister is authorised, with the approval of the Administrator-in-Council, to make regulations for public health purposes including location and construction of sewerage facilities, the methods of removal and sanitary and garbage and other waste and the general abatement of nuisances.

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8 Section 10 (8) of the Public Health Act
9 Revised
The Public Health Nuisance Regulations determines that any water-closet, earth-closet, privy, urinal, trench, cesspool, cesspit or drain so foul or in such a state or so placed or made or left as to be unsanitary, or a nuisance, or injurious or dangerous to health or likely to become so to be a nuisance which is actionable in law.

(xiii) The discharge of any slop or sullage water, or any rainwater from roofs, or any waste water whatsoever onto any public place, alley or lane, which inconveniences the normal passage of pedestrians.

(xiv) Any pollution, save in accordance with a valid permit granted by the Chief Medical Officer, of any stream, water course, or any dunder, industrial waste or other noxious matter, are considered to be nuisances, which are actionable in law. Of interest, any accumulation or deposit necessary for the effectual carrying on of any business or manufacture shall not be punishable as a nuisance if it is proved to the satisfaction of the Court that the accumulation or deposit has not been kept longer than is necessary for the purposes of the business or manufacture and that the best available means have been taken for preventing injury to health thereby.

There is no sewerage system or centralised wastewater treatment plant in Anguilla. The majority of household facilities are served by “septic tanks” and discharges of domestic or industrial wastewater from sewage treatment plants are largely uncontrolled. The majority of the septic tanks is sealed and cannot be accessed for inspection or de-sludging. Some institutions such as schools, the hospitals and the prison have sewage treatment package plants. Neither the existing Building Act No. 11 of 1954 nor the Building Code provides any form of relief, leaving the response squarely in the hands of environmental health officials.

With regard to the institution of appropriate penalties, environmental health officials have recommended a reasonable system whereby a minor non-compliance is not penalised in the first instance, but persistent non-offenders are. In accordance with the proposal, a points score will be assigned for each test result, and the points accumulated over the period of twelve months. When the points have exceeded key threshold levels, then action will be taken in accordance with what is prescribed in law. The legal framework will need to be revised to provide for this and for a system of fines and penalties that accompany infringement.

Stakeholder Workshop, 29 February 2000

The Pan American Health Organisation together with the Government of Anguilla hosted a Stakeholder Workshop on 29 February 2000. The workshop presented an excellent opportunity to explore the wide range of issues pertaining to environmental health
generally, food safety and water quality in Anguilla. The participants at the Workshop made the legislative policy recommendations in the following areas: -

A. Public Health Act, 1969

Although the Ministry’s main legislative vehicle on environmental health, this Act is seriously outdated. It does not adequately address or correct environmental health problems such as the disposal of liquid and solid waste, the discharge of untreated sewage, waste reduction, collection, storage, transport, recycling or any of the present-day concepts regarding waste management, air, noise or marine pollution. As such, the scope of this legislative instrument revolves around the maintenance of general sanitary conditions and cleanliness.

The Act is deficient in implementation machinery as provisions for sampling; monitoring and compliance procedures are weak. With regard to enforcement, the Public Health Act, 1969 relies upon nuisance theory, which places severe limitations on the effectiveness of enforcement. It was recommended that a revised Public Health Act should introduce modern day compliance and enforcement techniques such as standard setting. It should establish the power of the Environment Section to conduct baseline research as well as provisions for the institution of class action suits. This latter mechanisms has been found to be very useful especially where enforcement capability is low; similarly with regard to the use of incentives to encourage environment-friendly practices.

B. Food Safety

(i) the Ministry of Social Services be empowered to condemn, seize or take away food which appears to be diseased or unwholesome for human consumption.

(ii) the office of the Director of Health Services should be empowered to act on behalf of the Ministry of Social services as intermediary to Environmental Health officers in the exercise of their powers to enter any food establishment;

(iii) food establishments should be defined to mean any stall or any premises from which food preparation, serving or selling is conducted;

(iv) all food handlers should be required to be licensed;

(v) regulations should be established for port health to include imported food;

(vi) the inspection of meats at the ports before its delivery to merchants;

(vii) establishment of powers of inspection in Environmental Health inspectors at ports of entry;

(viii) a permit to build any food establishment or to renovate any building for food preparation should be required and made to the Planning Department in consultation with the Ministry of Social Services.
(ix) penalties and fines should be imposed on any food establishment or food handler for violation of the existing Act or regulations made thereunder;

(x) the word food should cover anything used as a food ingredient including additives which are applied in the food preparation but does not include animal feed, dog medicine or any water supply;

(xi) the categorisation of food establishments so that licensing fees may be differentiated;

(xii) the issuing of temporary food operating licences.

C. Water Quality

(a) the Public Health act should establish powers with regard to drinking water and wastewater in the Water Laboratory.

(b) regulations to facilitate the functioning of the Water Laboratory should be established under the Public Health Act.

(c) the role and relationship of the Water laboratory and the Environmental Health Section should be clarified.

(d) the role of the Water Laboratory and other government departments needs also to be clarified, in particular with regard to applications for planning permission and the Building Board.

(e) consideration should be given to the incorporation of legislation addressing waterworks and watercourses.

(f) the Public Health Act should be amended to –

• vest authority in the Water laboratory technician to enforce the provisions of the Act;

• include provisions to test, analyse and charge fees for monitoring air, noise and water quality;

• establish standards for drinking water quality including bottled water and for wastewater discharge;

• establish guidelines for design of septic tanks and cisterns;
• require licences for water tankers;
• institute a points system in the assessment of violations;
• imposition of a water analysis fee for the provision of water sampling services.

Conclusion

Environmental health legislation in Anguilla, like anywhere in the Caribbean region is outdated. But generally there is a willingness on the part of the agency officials that were consulted to strengthen the legislative framework and adopt national standards for drinking water and discharges (although priority exists with regard to its adoption with respect to sewage in the first instance).

Of specific concern is the need for a general revision of the Public Health Ordinance to keep pace with possible problems, to establish an effective regulatory framework to implement standards, appropriate penalties, new approaches to compliance and enforcement and introduce appropriate technologies in the area of food safety, public education and to ensure that there are adequately trained staff to enforce the laws when adopted.

With regard to the institution of appropriate penalties, environmental health officials have recommended a reasonable system whereby minor non-compliance is not penalised, but persistent non-offenders are. The implementation of this system will of necessity require reporting on the part of dischargers and regular sampling and monitoring on the part of officials. This must, of necessity, be accompanied by an increase of manpower with appropriate powers of entry to operating facilities including wastewater treatment plants.
APPENDIX I

SUMMARY OF REGIONAL CONCLUSIONS

Water Quality/Wastewater Management

As in other regions of the world, activities related to human settlements, agriculture and industry have been identified as major contributors to the pollutant loads reaching coastal and marine waters of the Caribbean. In order to mitigate and control the impact of these pollutants it is essential that the equality and levels of discharges be reduced. Sewage and industrial effluents have been identified as two of the most significant pollutants affecting the coastal and marine environment of the Caribbean. In response to this and recognizing the health implications of pollution and the need to protect the health of human beings and to sensitize people to environmental problems CEHI developed guidelines for sewage and the more important industries in the region. While these guidelines are actively being considered in relation to the development of a Protocol on Land Based Sources of Marine Pollution; not much work with regard to their adoption as the basis for the development of national standards is taking place within the individual PAHO-project countries. The results of an assignment by the Consultant reveal that there is a general interest on the part of the officials within the countries that were visited in the adoption of national standards for both sewage and industrial effluent, though sewage tended to occupy a higher priority.

Sewage disposal issues also occupy a high priority in the project countries particularly due to the importance of the tourism industry to the national economy. Because of the pressing economic problems that prevail however, activities for the adoption of the guidelines do not occupy a high priority. The officials will require active support to promote the activity. A lack of resources, both human, technical and financial is prevalent among all of the countries visited and it is very clear that it will be necessary that serious consideration be given to the provision of appropriate assistance to not only adopt national standards but also to implement and effectively enforce them.

Generally, there is considerable public concern in all the countries visited, about the impacts of contamination from sewage and industrial effluent on the coastal and marine environment and its impact on the domestic water supply. In relation to this it was the prevailing view that activities to promote the adoption and later implementation and enforcement of national standards for discharges should be on a regional basis and include all POEC countries. The information obtained would be useful in developing a regional proposal for funding from the international donor community. This initiative by PAHO to promote and support improvements in the legislative framework for wastewater management in five selected countries has laid the groundwork for the commencement of activities to adopt national standards for sewage and industrial effluent and has heightened awareness among officials.
A public awareness programme involving health, environment, tourism, water authorities and industry should be undertaken by PAHO to sensitize decision-makers and the public generally, to the adverse environmental, health and economic effects of pollution of the coastal and marine environment and drinking water sources, caused by wastewater discharges. Environmental audits should be required annually for existing businesses to improve wastewater generation and disposal.

In the regional context support from regional agencies such as PAHO and CEHI should be obtained to support a multi-step process for setting regional and national standards consisting of recommending guidelines, adopting regional guidelines and enacting national standards. Once the Guidelines are adopted the emphasis shifts from the regional to the national level. Training programmes for environmental health inspectors to approve applications, licences, inspect and monitor wastewater treatment plants including control sampling and enforce acts and Regulations should be conducted. Activities for the strengthening of laboratory capabilities should also be included in the regional work programme.

**Drinking Water Quality**

It is recognised that PAHO-POEC States have made rapid progress in the water sector during the past decade. In general, progress in the water sector has achieved basic professional standards of operation and has succeeded in meeting some of the most critical water quality objectives. The success of the achievements in providing piped drinking water supplies to a high percentage of the region’s population, as well as protection from water-borne diseases has generated expectations of even greater reliability and quality.

A key organisational rule is that the institutional and legal arrangements for the monitoring of drinking water quality could only be achieved through intersectoral coordination. This should include not only the agencies in charge of supplying water and promoting environmental health but also the set of institutions with responsibility for development and education. Those agencies that are responsible for the protection of environmental health and for the supply of water should consult with one another in order to agree on safe and feasible water quality standards. Local communities should also become involved together with major water users, including industrial or agricultural users, which may compete for the same source or water supply.

Drinking water quality legislation should clearly define that the water supply agency is legally responsible for the continuous quality of the water sold and/or supplied to the consumer and for proper supervision, maintenance, inspection and the safe operation of the water supply system. It is the water supply agency that provides water to the public. This agency should therefore be held legally responsible for the quality of the water up to a certain point in the distribution system. The Environmental Health agencies should therefore be responsible for monitoring and enforcing the prescribed standards for drinking water quality against these water suppliers.
Regulations should also place controls on the use of bottled water or water truck delivery services. A proposal has been made for the establishment of an independent certification of bottled water sources on a regional basis. Quality assurance should also be introduced and monitored by water supply agencies and certified laboratories. A network of regional reference laboratories, such as CEHI, should be identified which can provide the necessary technical support, advanced analytical services and assess quality assurance.

Legislation to protect water sources from contamination should also be introduced and should contain provisions for the protection of catchment areas, the conservation of water resources, the orderly development and use of water resources for other than domestic purposes, and for the collection, treatment and safe disposal of sewage to control pollution.

**Food safety**

Food legislation at all levels is paramount to good health and healthy living. The general objectives of the legislation are to provide a safe food supply which is nourishing, unadulterated and to set compliance standards in accordance with other agencies, to prevent the sale of unwholesome products, provide a vehicle for information exchange between food producers and the consumer and employ current technologies.

The legislative framework for the countries under study is in need of review. They lack appropriate standards, provisions for public awareness and education, information gathering and dissemination and for the most part rely on outdated technologies for enforcement. The regulations that deal with codes of sanitation, good manufacturing practices, packaging components, processing and labeling requirements and risk detection and assessment and such as CODEX Alimentarius and HACCP should be incorporated in the regulatory framework in so far as they are practicable, implementable and enforceable.

**Environmental Health Legislation**

Though seriously outdated, the *Public Health Acts* are the main legislative vehicles for addressing environmental health issues in Anguilla, BVI, Dominica, Grenada, and St. Kitts... It does not address important issues of wastewater management including the discharge of untreated sewage, waste reduction, collection, storage transport, recycling or any of the present day concepts regarding waste management. As such, the scope of the legislative framework for environmental health revolves around the maintenance of general sanitary conditions and cleanliness. Growing development pressures eventually will require intensified control over environmental pollution and waste disposal.
A revised framework should introduce compliance and enforcement techniques such as standard setting rather than be based upon nuisance theory solely. Environmental standards based on a no-discharge level could even be considered for some activities such as marinas. These Acts are also deficient in implementation machinery and should be revised to include provisions for sampling, monitoring and compliance procedures. Water quality testing needs to become more regularised with stronger monitoring and enforcement powers over activities over both drinking water supplies and water used for other purposes.

The principal objective of the revised legislative framework for environmental health should therefore be to broaden the scope of the public health aspects of the legislation and to establish appropriate institutional arrangements to support, co-ordinate and direct relevant environmental health activities.

Far too often the proper enforcement and implementation of parent legislation is undermined by the absence or inadequacy of regulations. The deficiencies of the Public Health Acts of Anguilla, BVI, Dominica, Grenada and St. Kitts will have to be addressed through comprehensive environmental health legislation. Taking into account the unavailability of resources to undertake this task, some of these deficiencies may be corrected by appropriate implementing regulations and may improve the existing legal and enforcement capabilities of environmental health agencies in the immediate and short term. A greater rationalisation of legislation and functions of various departments and agencies in similar or overlapping areas is also required. In some instances, enforcement measures will have to be upgraded and in a large number of cases penalties are inadequate. Finally, legislative efforts must be supported by ancillary factors such as education and public awareness.

Public health and environmental protection is a multi-faceted issue. The project countries, the subject of this study, evidence the need for greater harmonisation between the legislative framework of even related agencies. The need for sharing information and experiences among other Caribbean countries and institutions such as CEHI is also proposed. Because the task of law revision in environmental health is substantial and lengthy, international donor support might be obtained from agencies such as PAHO.
APPENDIX II

List Of Persons/Organisations Consulted

ANGUILLA - Dr. Jeremy Parr, DFID Environmental Health Advisor, _Stephenson Rogers, Principal Environmental Health Officer, Leroy Richardson, Environmental Health Officer_ Oliver Hodge, Environmental Health Officer __Ambrell Richardson, Environmental Health Officer __Lynrod Brooks, Environmental Health Officer __Marvela Richardson, Primary Health Care Manager __Jaine Rogers, Water Laboratory Technologist__ Orris Proctor, Director Physical Planning-Foster Rogers, Health Planner - Hon. Edison Baird, Minister of Social Services __ Peter Knight, CARICOM Public Health Consultant - Gordon Carnegie, Legal Advisor, Attorney General’s Chambers. 

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1. Introduction

The subject matter for consideration is the revision of the Public Health Act, (No. 22 of 1969), the Public Health (Nuisance) Regulations of 1981, the Public Health (Food Hygiene) Regulations No. 7 of 1978 and the Food Regulations of 1953.

Public health legislation in Anguilla has become outdated and irrelevant in many ways to the needs and requirements of a modern developing society. The government of Anguilla, has as a result, been experiencing difficulties in implementing its implementing its environmental health programme. The Pan American Health Organization has been supporting national efforts to reform the legislative framework to improve environmental health conditions in the country. In this regard, conclusions and recommendations have been made for strengthened legal framework for environmental health generally and for food safety and water quality.

2. Background

The legislative framework for environmental health has received little attention in Anguilla. In terms of the environmental problems currently demanding solution, much of this legislation is obsolescence, while one or two enactments are virtually obsolete. Except for the Litter Act, which was passed in 1977, the most relevant environmental health legislation dates back to 1969 - the Public Health Act. The Food Hygiene Regulations, which are made thereunder, was enacted in 1978. These pieces of legislation however do not provide a comprehensive framework for environmental health and for ensuring food safety and water quality in Anguilla.

Several activities have been conducted by the Ministry of Social Services in the interest of achieving legislative reform. With technical assistance from PAHO the following activities were conducted:

- An inventory of all relevant legislation on environmental health, food safety and water quality;
- Conduct of a Stakeholder Workshop on 29th February, 2000, involving ministry and environmental health officials and representatives from other Government agencies;
- Discussions with officials of other relevant agencies;
- Recommendations for strengthening the legislative framework.
3. Issues for Consideration

The results of the several activities that were conducted have all agreed that the Public Health Act, 1969, the Public Health (Nuisance) Regulations, the Food Regulations, 1953 and the Public Health (Food Hygiene) Regulations, 1978 are in need of revision. The principal provisions regarding these revisions should address:-

(a) Scope, Powers and functions of Environmental Health

The exiting scope and definition of environmental health contained in the Public Health Act, 1969 is too narrow. It is also equally weak and does not include provisions for standard setting, monitoring and the establishment of modern criteria to promote environmental health quality.

It does not adequately address or correct environmental health problems such as the disposal of liquid and solid waste, the discharge of untreated sewage, waste reduction, collection, storage, transport, recycling or any of the present-day concepts regarding waste management, air, noise or marine pollution. As such, the scope of this legislative instrument revolves around the maintenance of general sanitary conditions and cleanliness.

It was recommended that a revised Public Health Act should introduce modern day compliance and enforcement techniques such as standard setting. It should establish the power of the Environment Section to conduct baseline research as well as provisions for the institution of class action suits. This latter mechanisms has been found to be very useful especially where enforcement capability is low; similarly with regard to the use of incentives to encourage environment-friendly practices.

(b) Food safety

In general, the existing food safety regulations are in need of revision to establish firstly, a comprehensive legislative framework for its management and importantly to incorporate adequate enforcement powers for food handling and safety in Anguilla. Specific amendments that will be required to be made are as follows:-

(xiii) The Ministry of Social Services be empowered to condemn, seize or take away food, which appears to be diseased or unwholesome for human consumption.

(xiv) the office of the Director of Health Services should be empowered to act on behalf of the Ministry of Social services as intermediary to Environmental Health officers in the exercise of their powers to enter any food establishment;

(xv) food establishments should be defined to mean any stall or any premises from which food preparation, serving or selling is conducted;
(xvi) all food handlers should be required to be licensed;

(xvii) regulations should be established for port health to include imported food;

(xviii) the inspection of meats at the ports before its delivery to merchants;

(xix) establishment of powers of inspection in Environmental Health inspectors at ports of entry;

(xx) a permit to build any food establishment or to renovate any building for food preparation should be required and made to the Planning Department in consultation with the Ministry of Social Services.

(xxi) penalties and fines should be imposed on any food establishment or food handler for violation of the existing Act or regulations made thereunder;

(xxii) the word food should cover anything used as a food ingredient including additives which are applied in the food preparation but does not include animal feed, dog medicine or any water supply;

(xxiii) the categorisation of food establishments so that licensing fees may be differentiated;

(xxiv) the issuing of temporary food operating licences.

(c) **Water Quality**

Anguillans largely rely on the collection of rainwater from roofs and storage in domestic cisterns and on the abstraction of groundwater for their domestic water supplies. A new source of water has been obtained from a newly commissioned desalination plant. There is no centralised sewage disposal system in Anguilla or wastewater treatment plant in Anguilla. The majority of household facilities are served by “septic tanks” and discharges of domestic or industrial wastewater from sewage treatment plants are largely uncontrolled. The majority of these tanks is sealed and cannot be accessed for inspection or de-sludging. It is recommended that the following amendments be made to the existing legislative framework: -

(a) the Public Health Act should establish powers with regard to drinking water and wastewater in the Water Laboratory;

(b) regulations to facilitate the functioning of the Water Laboratory should be established under the Public Health Act;

(c) the role and relationship of the Water Laboratory and the Environmental Health Section should be clarified;
(d) the role of the Water Laboratory and other government departments needs also to be clarified, in particular with regard to applications for planning permission and the Building Board.

(e) consideration should be given to the incorporation of legislation addressing waterworks and watercourses.

(f) the Public Health Act should be amended to –

• vest authority in the Water Laboratory technician to enforce the provisions of the Act;

• include provisions to test, analyse and charge fees for monitoring air, noise and water quality;

• establish standards for drinking water quality including bottled water and for wastewater discharge;

• establish guidelines for design of septic tanks and cisterns;

• require licences for water tankers;

• institute a points system in the assessment of violations,

• imposition of a water analysis fee for the provision of water sampling services.

4. Legislation that will be affected

Public Health Act No. 22 of 1969

Public Health (Nuisances) Regulations

Food Regulations, 1953

Public Health (Food Hygiene) Regulations, 1978

Waterworks and Watercourses Ordinance (No. 185 of 1956)

Waterworks and Watercourses Regulations

Building Act (No. 11 of 1954)
5. **Time Factor**

   Anguilla’s activities regarding the revision of the legislative framework for environmental health, food safety and water quality has maintained the attention of PAHO which considers that the country’s bold initiative in addressing the weaknesses in the legislative framework for these areas can provide impetus for regional initiatives to harmonise the environmental health framework. PAHO is committed to seeing this exercise to completion.

   There exists a heightened sensitivity, enthusiasm and awareness among public officials in Anguilla, which could stand to be lost, should the momentum and the flow of activities be subjected to inordinate delays. The urgency of the task ahead in making the recommended amendments to the legislative framework cannot be overemphasised.

6. **Recommendation**

   That amendments be made to the legislative framework for environmental health, food safety and water quality be made according to the recommendations specified herein.
APPENDIX IV

LIST OF ACRONYMS

BVI - British Virgin Islands
CEHI - Caribbean Environmental Health Institute
DFID – Department for International Development
DOWASCO – Dominica Water and Sewerage Company Limited
EHO’s – Environmental Health Officers
HACCP - Hazard Analysis Critical Control Point Evaluations
PAHO - Pan American Health Organisation
UNCED - United Nations Conference on Environment and Development
WHO - World Health Organisation
WL - Water Laboratory
WQM – Water Quality Monitoring
APPENDIX III

SELECTED BIBLIOGRAPHY


