

Mission: To ensure that the general environment of the Port Area and by extension Grand Bahama Island is safeguarded against environmental degradation. Objective: To receive favourable consideration of the addendum to the Freeport Bye-Laws. \_Freeport (Natural Resources Protection and Management) Bye-Laws.
\_Freeport (Environmental Management and Protection) Bye-Laws.
\_Freeport (Pollution Prevention and Waste Management) Bye-Laws.
\_Freeport (Nuisances) Bye-Laws.
\_Additional Clauses to Existing Bye-Laws.

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#### FREEPORT BYE-LAWS FREEPORT (NATURAL RESOURCES PROTECTION AND MANAGEMENT) BYE-LAWS

#### PART 1

| Title          | 1. These Bye-laws may be cited as the Freeport (Natural Resources Protection) Bye-laws.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| Interpretation | 2. In these Bye-laws, unless the context otherwise requires -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                | "the act" means the Freeport Bye-laws Act;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                | "the authority" means the Port Authority":                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                | "alteration" - Human-caused activity that modifies, transforms or otherwise<br>changes the vegetation, including, but not limited to: 1. Removal,<br>displacement, mowing, or disturbance (severe pruning, hatracking or inter-<br>nodal cutting, or poisoning) of vegetation excluding prescribed burns for<br>the management of native vegetation communities; 2. Removal,<br>displacement, demucking or disturbance of soil, rock, minerals or water<br>within the plant's root zone; 3. Introduction of livestock for grazing; 4.<br>placement of vehicles, structures, debris, fill or other material objects<br>thereon, including introduction or injection of water and other substances;<br>and 5. Use of mechanical equipment within the plant's root zone. |
|                | "aquifer" - A groundwater bearing geologic formation, or formations, that<br>contain enough saturated permeable material to yield significant quantities<br>of water;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                | "beach" - The zone of unconsolidated material that extends landward from the<br>mean high water line of the Atlantic Ocean and inlets to the place where<br>there is a marked change in material or physiographic form, or to the line of<br>permanent vegetation, usually the effective limit of storm waves. Beach is<br>alternately termed shore;                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                | "coastal management" includes the protection, conservation, rehabilitation,<br>management and ecologically sustainable development of the coastal zone;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                | "coastal resources" means the natural and cultural resources of the coastal zone,<br>such as the coastal wetland, beach, dune, reef, fish and wildlife habitat;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                | "coastal zone" means that area of land and water from the Authority's territorial<br>limits seaward (land ward side of highwater mark) to the most inland extent<br>of marine influences;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                | "development" means the construction, relocation, or enlargement of any<br>building or structure and all site preparation therefore, the grading,<br>excavation or filling on beaches or dunes, and shall include residential                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

development, commercial development, industrial development, and public development;

- "dune" A hill or ridge of windblown sand and marine deposits lying landward of, and adjacent to, the beach which is formed by natural or artificial processes;
- "dune crest"- The highest point in elevation of the dune;
- "dune profile" The cross-sectional configuration of the dune;
- "environmental development permit" The environmental development permit shall state the conditions to which a proposed project will be subject to.
- "freshwater lens zone" The freshwater lens zone is the designated and established by the Authority water supply source to be protected by these bye-laws;
- "groundwater" water that fills all the unblocked voids of underlying material below the ground surface, which is the upper limit of saturation, or water which is held in the unsaturated zone by capillarity.
- "native tree(s) or native vegetation" Vegetation with a natural geographic distribution indigenous to the Bahamas and not introduced by humans
- "port area" as defined in the Interpretation and General Clauses Act of the Statute Laws of The Bahamas;
- "potable water" Water that is intended for drinking, culinary or domestic purposes.
- "sand" Sediments having a distribution of particle diameters between 0.074 and 4.76 millimeters, as defined in the Unified Soils Classification System.
- "sand preservation zone (SPZ)" An area of jurisdiction, established by these Bye-laws, for the purpose of maintaining the volume of beach sand within the beach/dune system;
- "wetland" as defined by Article 1.1 of the Ramsar Convention- wetlands are defined as :"areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of maritime water the depth of which at low tide does not exceed six meters." In addition the Convention (Article 2.1) provides that wetlands, and islands or bodies of marine water deeper than six meters at low tide lying within the wetlands."

#### PART II: COASTAL RESOURCES PROTECTION AND RESTORATION

| Purpose and<br>Intent                                        | <ul> <li>3. (1) This Bye-law is intended to:</li> <li>a. Promote efficient management of coastal resources, particularly sand, coral, and other calcareous substances;</li> <li>b. Promote land-use master planning and floodplain management in coastal areas, which are compatible with the existing environment; and</li> <li>c. Protect ecologically significant coastal areas for their contribution to marine productivity and for the value as habitats, preserving the functions and integrity of reefs, dune systems, marine meadows, salt ponds, mangroves and other sensitive coastal ecosystems or features.</li> </ul>                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applicability                                                | 4. All provisions of this bye-law shall be effective within the boundaries of the Port Area, and shall create prohibitions, set restrictions, and establish requirements all of which being aimed to preserve and protect the beach/coastal habitat and its resources.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Activities<br>requiring<br>permission on<br>the coastal zone | <ul> <li>5. (1) A person must not, without the permission or written consent of the Authority:</li> <li>a. Develop any part of the coastal zone ;</li> <li>b. Conduct mining operations of any sort or research for a mining operation;</li> <li>c. Set up new industries and/or expand existing industries; ;</li> <li>d. Set up and/or expand fish processing or warehousing units;</li> <li>e. Set up and/or expand units/mechanisms for disposal of waste and effluents;</li> <li>f. Reclamation of land, construction of obstructions that could disturbthe natural course of sea water including but not limited to, mechanisms for control of coastal erosion and maintenance or clearing of waterways, channels and ports; and</li> <li>g. Enhance and/or alter sand dunes, natural features including landscape changes for beautification, recreational and other such purpose.</li> </ul> |
| Application<br>Process                                       | <ul> <li>6. Persons wishing to carry out activities which alter or modify the coastal zone must submit an application, the details of which will be determined by the Authority.</li> <li>(a) An application shall not be deemed complete until the application fee and all information necessary to fully understand the extent, nature and potential impacts of a proposed project are received by the Authority. Such information may include, but is not limited to: <ul> <li>(i) A certified site plan or survey, where applicable, showing all easements. both plan view and cross-sectional view sketches may be required;</li> </ul> </li> </ul>                                                                                                                                                                                                                                             |

- (ii) Parcel information including a location map, a recent aerial photograph with the parcel clearly delineated, and representative color photographs; and
- (iii) A written explanation of the need and intent of the project and a description of construction or alteration methodologies, techniques, proposed mitigation and spoil management plan;
- (iv) The Authority may include permit conditions deemed reasonably necessary to protect the environmental integrity of the site of the project and adjacent areas.
- (v) A completed application form with the notarized signature of the parcel owner or authorized agent of the parcel owner;
- (c) Applications shall be deemed inactive until such time that written notice is received by the Authority that the application has been made for a building permit, civil works permit, land development permit, request for review of technical compliance or noticed completeness of requested information is received.
- (d) Any application containing false information, or any permit issued based upon false information, may be denied or revoked.

7. Depending on the nature, scale, and/or anticipated impact of a development or an activity on the coast, an environmental assessment report will be required. The details will be determined by the Authority.

8. (1) Due to the coastal nature of Grand Bahama, all developments shall be subject to the Coastal Management Plan (CMP) adopted by the Authority, which will include—

(a) a statement of the principles and policies by which the coastal zone and its designated areas are to be managed;

(b) a map or series of maps showing coastal resource information; and

(c) a description of the guiding principles, policies and requirements by which the coastal area will be managed.

9. The preservation of coastal areas will be addressed in the CMP and may address:

(1) Areas of unique, scarce, fragile or vulnerable natural habitat; unique or fragile, physical, figuration, historical significance, cultural value or scenic importance;

(2) Areas of high natural productivity or essential habitat for living resources, including fish, wildlife, and endangered species and the various trophic

Requirement of an Environmental Impact Assessment

Coastal Management Plan

Areas for Preservation considerations

levels in the food web critical to their well-being;

(3) Areas of substantial recreational value and/or opportunity;

(4) Areas where developments and facilities are dependent upon the utilization of, or access to, coastal waters;

(5) Areas of unique hydrologic, geologic or topographic significance for industrial or commercial development or for dredge spoil disposal;

(6) Areas or urban concentration where shoreline utilization and water uses are highly competitive;

(7) Areas that, if development was permitted, might be subject to significant hazard due to storms, slides, floods, erosion, settlement, salt water intrusion, and sea level rise; and

(8) Areas needed to protect, maintain or replenish coastal lands or resources including coastal flood plains, aquifers and their recharge areas, estuaries, sand dunes, coral and other reefs, beaches, and offshore areas.

10. (1) Excavating, grading, mining or dredging which diminishes the erosion protection afforded by near-shore areas and beaches shall be restricted. However, civil work permits for dredging may be issued for constructing or maintaining navigation channels, and bypassing sand around natural and man-made obstructions.

(2) Sand mining within the Sand Preservation Zone (SPZ) is prohibited. Sediment analysis of existing beach/dune and any proposed fill material to be mixed with the existing sand may be required by the Authority.

(3) Development within the Sand Preservation Zone is prohibited unless expressly allowed by the Authority, because of the nature of structure being developed i.e. a crossover, or studies done which either demonstrate a proven benefit to the coastal environment or does not accelerate or promote coastal erosion of the area in question.

(4) Developing, excavating, grading or mining of primary and secondary dunes shall be restricted and subject to approval and permitting by the Authority;(5) Vehicular traffic on the beach, primary and secondary dunes shall be restricted except in those areas designated by the Authority for dune crossing.

(6) Foot traffic which may cause sufficient damage to - dunes and which may lead to erosion shall be prohibited. Pedestrian passage across primary dunes must utilize elevated walkways and stairways, or other specially designed dune-crossing structures approved by the Authority.

11. The following standard conditions shall apply to dune crossovers:

1. The height and width of the structure shall be at a level to allow for sand movement or accretion in the dynamic dune field.

Restrictions on regulated activities affecting coastal resources

Standards for

**Dune Crossovers** 

|         | <ol> <li>The terminal point of the crossover shall be seaward of the seaward most dune but shall not encroach seaward of the ordinary high water line in the active inter-tidal beach.</li> <li>If the shoreline erodes and the crossover extends seaward of the ordinary high water line, it will be the responsibility of the applicant to move the permitted improvements back to the dry sand beach, landward of the ordinary high water line.</li> <li>The structure shall begin at the toe of the landward most dune.</li> <li>Heavy equipment is prohibited in the SPZ, unless approved by the Authority for special circumstances. Generally, projects must be constructed using hand tools or light machineries.</li> <li>Clearing and grading of dunes shall only be conducted with the specific authorization of the Authority.</li> <li>Stockpiling of materials in the dunes is prohibited .</li> <li>Vegetation may be cleared only for the width of the permitted structure. The maintenance trimming of vegetation will only be allowed within 6" of the sides of the structure and 7' high over the structure.</li> <li>No motorized vehicles are permitted on the dune or beach, except permission is expressly granted by the Authority for an approved purpose.</li> <li>Any sand needed to restore the site to pre-project vegetated and topographic conditions, or for backfilling, must be beach quality and obtained from an upland source and not from the beach.</li> </ol> |
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| Notices | 12. (1)The Authority may issue a notice to a person directing the person, within the time stated, to: -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|         | (a) take the action stated in the notice to protect land; or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|         | (b) stop, cease and desist, any activity stated in the notice, if the Authority is of the opinion that the activity is likely to have a significant adverse effect on coastal management.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|         | (2) If the name of the person who started or is about to start the activity is                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|         | not known, the notice may be given—<br>(a) in the daily newspaper circulation; or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|         | (b) by displaying it in a prominent position on the land.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|         | <ul><li>(3) Without limiting subsection (2), the notice may require the person-</li><li>(a) to build or maintain works; or</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|         | <ul><li>(b) to plant, cultivate , preserve, or not damage, vegetation native to the area; or</li><li>(c) not to alter the geographical features of land.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|         | (4) The notice will allow the person served to appeal against the decision, within a specified period stated in the notice.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Bond    | 13. The Authority may require a bond or other form of financial security from a person or party (entity) submitting an application for a development permit. The                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

amount of such bond or security shall be determined by the Authority, so as to ensure compliance with the terms and conditions stated in the coastal erosion management permit.

#### PART III: **VEGETATION PRESERVATION AND PROTECTION Purpose and** 14. (1) The goals of this bye-law are: Intent a. To avoid the unnecessary destruction of native vegetation (Schedule 1): b. To pursue eradication of invasive non-native vegetation (Schedule 1); c. To maintain native vegetation in locations where aquifer recharge areas exist or critical habitats and ecosystems are intact; d. To minimize adverse impacts to native vegetation in cases of land-use change; e. To mitigate the removal of native vegetation when the vegetation cannot be preserved in place or relocated under the proposed site plan; and f. To relocate any movable native vegetation that cannot be incorporated into the site plan to a parcel, approved by the Authority. (2) This bye-law shall: Establish a programme to preserve and protect native vegetation. Applicability 15. The applicability of this bye-law is within the Port Area: The Authority shall have regulatory authority over the alteration or removal of non-native and native upland vegetation, and the establishment and maintenance of upland preserve areas. Application 16. Requirements and Process: Process (a) Permit applications shall be made on forms provided by Authority. (b) An application shall not be deemed complete until the application fee and all information necessary to fully understand the extent, nature and potential impacts of a proposed project are received by Authority. Such information may include, but is not limited to: (i) A written explanation of the need and intent of the project and a description of construction or alteration methodologies;

- (ii) A certified site plan or survey, where applicable, showing all easements. Both plan view and cross-sectional view sketches may be required;
- (iii) Parcel information including a location map, a recent aerial photograph with the parcel clearly delineated, and representative color photographs;
- (iv) Identification of the type and location of native vegetation in the vicinity of, and likely to be affected by the project;
- (v) An Incorporated Vegetation Plan which graphically depicts the location and field tag number for each native tree and palm to remain undisturbed on the parcel during construction and the natural life of the vegetation. The Incorporated Vegetation Plan may also be required to be incorporated as a feature of the site plan;
- (vi) A numbered tabular list of all native trees/palms surveyed, indicating the type of tree/palm the DBH or height of clear trunk if palm, and whether the parcel owner proposes to keep the tree/palm in place, relocate it, offer it for surplus, remove it or mitigate for its removal;
- (vii) A completed Vegetation Surplus Form which identifies surplus native vegetation which the parcel owner determines cannot otherwise be used on the parcel and is providing for the use of the Surplus Vegetation Programme;
- (viii) An application may be accompanied by an Environmental Impact Assessment which evaluates the impact of the given activity. The Authority may include permit conditions deemed reasonably necessary to protect the environmental integrity of any on-site adjacent wetland areas, mitigation areas and upland preserves and to prevent harm to listed plant and animal species;
- (ix) A completed application form with the notarized signature of the parcel owner or authorized agent of the parcel owner; and
- (c) Any application containing false information, or any permit issued based upon false information, may be denied or revoked.
- 17. No permit shall be issued unless the application demonstrates that the project:
  - 1. Complies with water quality rules and standards set forth by the Authority;
  - 2. Will not adversely affect the conservation of fish or wildlife or their habitats, or adversely affect recreational fisheries or their habitats;
  - 3. Will not adversely impact endangered or threatened species, or their habitat;
  - 4. Incorporates into the design alternatives and modifications to avoid or minimize impacts to native vegetation; and
  - 5. Complies with any applicable national or local designated preserve, conservation or mitigation area.

Standards of Issuance

The permit shall be issued within thirty (30) working days of determination by the Authority that the application is complete and there are no outstanding violations on the parcel. The Authority shall make a parcel inspection within fifteen (15) working days of a request by a parcel owner.

**De Minimis** 18. Those projects for which the Authority provides a written determination that there will be no significant adverse environmental impacts. Approvals may include but are not limited to:

- (i) Removal of native vegetation that has been destroyed or so severely damaged, inadvertently or by acts of nature, that it constitutes a peril to life or property;
- (ii) Certification by a certified arborist that vegetation is a hazard;
- (iii) Determination by the Authority staff or other qualified professional that vegetation may compromise the integrity of a structure; \
- (iv) Removal to selectively thin vegetation by hand; or,
- (v) Certification by the Fire Department that a 30 foot buffer should be cleared around designated structures through a Fire Wise programme.

19. No person may alter or cause to be altered any vegetation unless such alteration is exempted by, or expressly approved by this bye-law.

- 20. The following activities do not require a permit under this bye-law:
- (1) Botanical Gardens, Botanical Research Centers, Licensed Commercial Nurseries, or Bonafide Agricultural Operations.
- (2) Vegetation alteration associated with subsequent harvesting activities, except within preserve areas or vegetated buffers, that are part of the on-going activities of the existing operation, the harvesting or alteration of vegetation previously planted and cultivated for production as part of an ongoing botanical garden, botanical research center, nursery or bona fide agricultural operation is an exempt activity. Initial clearing of a parcel is not an exempt activity.
- (3) Fencing. The minimal removal of trees or understory necessary to install a fence, provided that no tree three inches or greater DBH is removed, the path cleared for the fence does not exceed five feet in width, and native vegetation is removed solely by hand.
- (4) Forest Management Activities. Selective tree removal for forest management activities as defined in the current Forest Management Plan as approved by the Authority.
- (5) Improved Parcels. Removal of prohibited and invasive non-native vegetation. The removal of dead and dying vegetation and vegetation not subject to this bye-law is also exempt, provided however, the removal complies with the Planning Code.
- (6) Landscape Plant Removal. Removal or alteration, from an improved parcel, of non-native vegetation installed as landscape, provided the activity complies with the requirements of the Planning Code, and no removal or alteration occurs from native upland vegetation buffers, preserves, or

Approval Required Unless Exempt Exemptions jurisdictional wetlands.

- (7) Lot Clearing Provisions. Removal of prohibited and invasive non-native vegetation required pursuant to the Lot Clearing Provision in the Planning Code, or at the direction of a public law enforcement agency pursuant to necessary law enforcement activity.
- (8) Mitigation or Enhancement Projects. Activities conducted pursuant to a permit from the Authority, including activities approved under an adopted Surface Water Improvement and Management Plan.
- (9) Natural Emergencies. The provisions of this bye-law may be suspended or waived by the Director of Authority during a period of officially declared emergency, such as a hurricane, windstorm, tropical storm, flood or similar disaster.
- (10) Parks and Recreation. Alterations of vegetation pursuant to an adopted management plan for government maintained parks, recreation areas, wildlife management areas, conservation areas and preserves, excluding new construction or parcel improvement.
- (11) Preserve Management Activities. Preserve management activities provided that:
  - (i) The preserve area is designated by deed restriction, plat, restrictive covenant, or conservation easement and is dedicated to a public entity or approved private conservation group for preservation in perpetuity; \
  - (ii) The activity furthers the natural values and functions of the ecological communities present, such as clearing firebreaks for prescribed burns or construction of fences; and
  - (iii) The preserve area has a preserve management plan approved by Authority.
- (12) Pruning. Pruning of native vegetation in non-preserve areas in accordance with the American National Standards Institute, (ANSI) A-300, and pursuant to Landscaping Code Installation, Maintenance, Pruning and Irrigation to allow for healthy growth, to promote safety, and to remove dead or dying vegetation, provided there is no cutting back of limbs to a point between branch collars or buds larger than one inch in diameter within the tree's crown.
- (13) Utilities, Water Control, and Road ROW. Alteration of vegetation is permitted within drainage easements associated with repairs to or maintenance of existing canal structures at the direction of the Authority or the Grand Bahama Utility Company within drainage easements, where the vegetation is interfering with drainage or services provided by the utility company. Alteration of vegetation is permitted within a utility easement, where the vegetation is interfering with services provided by a utility. Alteration of vegetation is permitted within a road ROW for normal maintenance activities. Alteration associated with new construction is not an exempt activity.

(14) Survey or Other Test Required. The necessary removal of vegetation by, or at the direction of, a qualified surveyor and mapper, qualified geologist, or qualified engineer licensed by the Authority to conduct a survey or other required test, provided that no tree three inches or greater DBH is removed, the path cleared does not exceed five feet in width, and native vegetation is removed solely by hand.

21. Removal of any protected tree species as established by the Authority is prohibited unless the following criteria are met:

- i. Site plans shall be developed to incorporate any protected tree or specimen tree in its original location to the greatest extent possible;
- ii. A protected tree or specimen tree shall be relocated in a manner to ensure survivability if there is no reasonable alternative that allows incorporation of the tree into the parcel design;
- iii. If a protected tree species or specimen tree cannot be relocated, the parcel owner shall install replacement plantings consisting of native vegetation pursuant to Schedule 2, Tree Replacement Table. This requirement is in addition to Landscape Code requirements and any other conditions of approval. Off-site replacement shall be allowed if on-site planting is not feasible due to unsuitable parcel conditions. Off-site planting shall be in or adjacent to a public park parcel or native upland area;
- iv. The parcel owner shall provide irrigation, mulch, and other practical means to ensure survivorship of any relocated protected tree. If a relocated protected tree or specimen tree does not survive, it shall be replaced with a native tree pursuant to Schedule 2, The Tree Replacement Table.
- v. Replacement planting consisting of native shrub vegetation may be approved on a case by case basis, where appropriate soil characteristics exist and the amount of remaining canopy and other understory vegetation will be sufficient;
- vi. Sabal palms may be allowed as replacement plantings for canopy trees if approved by the Authority and planted at 3:1 (palms: required replacement trees) base on Schedule 2- Tree Replacement Table, on 10 foot centers, +/-1 foot and grouped as shown on a planting plan approved by the Authority;
- vii. At least 50 percent of the trees planted as replacement planting for removal of native trees shall be the same species as the trees removed provided that the replacement vegetation is locally available; and
- viii. For bonafide agriculture activities, mitigation for removal of protected trees and specimen trees may be accomplished by incorporation of relocatable trees on the parcel, use of relocatable trees as nursery stock,

Protected Tree

Removal

donation of relocatable trees to public agencies, sale of relocatable trees, or relocation to off-site areas approved by the Authority.

22. Plan for incorporating and relocating existing native vegetation:

- (1) Existing native vegetation shall be incorporated into the site plan and protected during construction.
- (2) Parcel improvement features shall be configured to minimize removal of existing native vegetation and maximize the use of areas dominated by prohibited and invasive non-native vegetation.
- (3) Existing native vegetation that cannot be preserved in place shall be relocated to appropriate buffer and open space areas on the parcel.
- (4) Relocatable native vegetation that cannot be incorporated into the parcel may be considered surplus.
- (5) Non-relocatable native vegetation that cannot be maintained on the parcel shall be mitigated for in accordance with the standards established by the Authority.
- (6) When native trees are removed or damaged without a permit or when trees that were to be preserved in place or relocated are damaged or destroyed during activities conducted with a permit, they shall be replaced at double the rate shown in the Schedule 2, The Tree Replacement Table.:
- 23. A violation shall be committed if:
  - (1) The alteration or removal of one protected tree or specimen tree or the alteration or removal of up to 1,500 square feet of vegetation without a valid permit, unless expressly exempt under this bye-law. Alteration or removal of each additional protected tree or specimen tree and alteration of each additional 1,500 square feet of vegetation or portion thereof in violation of this bye-law shall constitute a separate and additional violation.
  - (2) Failure to comply with a condition of a permit issued by the Authority pursuant to this bye-law or a requirement of a Preserve Management Plan approved by the Authority. Each condition or requirement violated and each occurrence of a violation shall constitute as a separate violation.
  - (3) Failure to comply with the requirements of this bye-law or any approval granted or activity authorized hereunder.
  - (4) Failure to comply with the Environmental Development Permit issued prior to the effective date of this bye-law.
  - (5) Planting invasive non-native vegetation.

Incorporation or Relocation of Existing Native Vegetation

Violations

- (6) Planting non-native vegetation within a preserve.
- (7) Conversion of a parcel cleared for bonafide agriculture to another use prior to use as agriculture.

Any parcel where a violation of any bye-laws administered by Authority has occurred shall not be eligible for a permit under this bye-law until such violation has been resolved.

**Enforcement** 24. To enforce compliance with this bye-law, the Authority may issue a cease and desist order or require that a building permit or Certificate of Occupancy be withheld. A violation of this bye-law shall be punishable by one or more of the following:

- i. Quadruple permit fees for violations involving activities conducted without a valid permit that may otherwise have been permitted;
- ii. The Authority may take any other appropriate legal action, including but not limited to, administration action, and requests for temporary and permanent injunctions to enforce the provisions of this bye-law; and
- iii. An Environmental Development Permit issued prior to, and with obligations beyond the effective date of this bye-law, shall remain in full force and effect. Accordingly, the enforcement provisions herein shall apply to any violation of an Environmental Development Permit issued prior to, and with obligations beyond, the effective date of this bye-law.

#### PART IV: WETLAND PRESERVATION AND PROTECTION

- 25. (1) The goals of this bye-law are:
  - a. To provide the framework for the preservation, restoration and management of wetlands, in conjunction with the CMP and sustainable development practices;
  - b. To avoid the unnecessary destruction of wetlands;
  - c. To minimize adverse impacts to wetlands during land-use changes or parcel improvement; and
  - d. To require mitigation efforts when wetlands in an existing footprint cannot be preserved, under the proposed land-use plan.

(2) This bye-law shall:

- a. Establish a programme to preserve and protect wetlands;
- b. Prohibit the destruction of wetlands; and
- c. Set restrictions and requirements to protect and preserve wetlands

Purpose and Intent

|                         | situated within the Port Area and to maintain their functions so that<br>there will be no net loss of those services, functions and values due to<br>land-use changes or other activities.                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                         | d. Establish a wetland mitigation programme.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Applicability           | 26. The Authority shall have regulatory authority over all wetlands within the Port Area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| Wetlands<br>Alteration  | 27. For Wetlands Alteration an Environmental Development Permit is required for<br>any construction or alteration, (including but not limited to dredging, filling,<br>removing or altering vegetation or draining or flooding) on, in or over wetlands in the<br>Port Area. The Environmental Development Permit may be incorporated into permits<br>for upland vegetation as described above in this bye-law.                                                                                                                                                                                                     |  |
| Wetland Analysis        | 28. Any changes in land-use which could potentially impact the status of the wetland will require the baseline and specific quantitative analysis. This analysis would have                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| Approval Process        | to be conducted by a specialist approved by the GBPA.<br>29. The regulatory agency of the Authority shall determine whether the analysis of<br>the proposed land-use change is sustainable i.e. protects the continued functions and<br>convises of the monostive wetlands                                                                                                                                                                                                                                                                                                                                          |  |
| Mitigation              | services of the respective wetlands<br>30. The Authority may require mitigation measures that shall be defined on a case by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| Restrictions            | <ul> <li>case basis.</li> <li>31. The Authority may impose restrictions or set standards applicable to any land use change or development adjacent to, or in proximity of any wetlands, including but not limited to the following: <ul> <li>Dumping</li> <li>Changes to the hydrology</li> <li>Wastewater treatment</li> <li>Solid waste management</li> <li>The use of fertilizers and/or chemicals in the surrounding areas</li> <li>The construction of road ways that may impede the natural flow of wetlands or divert stormwater into the wetlands; and</li> <li>Dredging or filling.</li> </ul> </li> </ul> |  |
| Purpose and<br>Intent   | PART V:<br>FRESHWATER LENS PROTECTION<br>32 The purpose and intent of this bye-law is to protect and safeguard freshwater<br>resources of the Port Area by providing criteria for regulating and prohibiting the use,<br>handling, production and storage of certain deleterious substances which may impair<br>present and future public potable water supply wells and the freshwater lens, and to<br>provide for the sustainable management of the Port Area freshwater resources to<br>safeguard the quality and quantity of those resources.                                                                   |  |
| Exemption<br>Activities | 33. General Exemption of Activities and the Criteria:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|                         | (1) Fire, Police, and Emergency Medical Services. Existing fire, police, and<br>emergency medical services are exempt from the Freshwater Lens<br>prohibitions set forth in these bye-laws.                                                                                                                                                                                                                                                                                                                                                                                                                         |  |

- (2) Utilities in Freshwater Lens Zone. Existing utilities shall be exempt, except for the maintenance and refueling of vehicles, from the Freshwater Lens prohibitions set forth in Authority regulations, guidelines and standards.
- (3) Continuous Transit. The transportation of any regulated substances through the Freshwater Lens shall be exempt from the provisions of this bye-law, provided that the transporting motor vehicle is in continuous transit. The transport of such substances through existing permanent pipelines is also exempt, provided that the currently authorized use or uses are not changed, and provided that leak detection and monitoring as approved by the Authority are employed. No general exemption or operating permit application is required except that an operating permit is required to establish the leak detection and monitoring requirements for said existing pipelines. Any new pipelines constructed through the Freshwater Lens and carrying Regulated Substances shall be provided with secondary containment, leak detection and monitoring as approved by the Authority.
- (4) Vehicular and Lawn Maintenance Fuel and Lubricant Use. The use in a vehicle or lawn maintenance equipment of any regulated substance solely as fuel in that vehicle or equipment fuel tank or as a lubricant in that vehicle or equipment shall be exempt from the provisions of this bye-law. No general exemption or operating permit application is required.
- (5) Application of Pesticides, Herbicides, Fungicides and Rodenticides. The application of those regulated substances used as pesticides, herbicides, fungicides, and rodenticide in recreation, agriculture, pest control and aquatic weed control activities shall be exempt from the provisions of this bye-law provided that:
  - a. in the Freshwater Lens Zone, the application is in strict conformity with the use requirement as set forth in the Pollution Prevention & Waste Management bye-laws and other prescribed regulations and appropriate national registries and as indicated on the containers in which the substances are sold;
  - b. in the Freshwater Lens Zone, the application of any of the pesticides, herbicides, fungicides, and rodenticide shall be reported to the Authority. Records shall be kept of the date and amount of these substances applied at each location and said records shall be available for inspection at reasonable times by the Authority;
  - c. in the Freshwater Lens Zone, the pesticides, herbicides, fungicides, and rodenticide shall not be handled during application in a quantity exceeding 700 gallons of formulation; and
  - d. all nonresidential applicators of pesticides, herbicides, fungicides, and

rodenticide who apply those substances in the Freshwater Lens Zone shall obtain an operating permit covering all application operations using these materials under one permit and shall comply with all the requirements of the Permit Conditions.

- 34. The conditions for which permission will be granted for activities within the Freshwater Lens Zone, will include:
- (a) Alterations and Expansions. The Authority shall be notified in writing prior to the expansion, alteration or modification of an activity holding an operating permit. Such expansion, alteration, or modification may result from increased square footage of production or storage capacity, or increased quantities of regulated substances, or changes in types of regulated substances beyond those square footages, quantities, and types upon which the permit was issued.
- (b) Reconstruction after Catastrophe. Reconstruction of any portion of a structure or building in which there is any activity subject to the provisions of this regulation which is damaged by fire, vandalism, flood, hurricane storm surge, explosion, collapse, wind, war or other catastrophe shall be in strict conformity with this bye-law.
- (o) Domestic Wastewater and Stormwater Treatment:
  - (a) Sanitary Sewer Mains. All new or replacement installations of sanitary sewer mains in the Freshwater Lens Zone shall be constructed to force main standards. Minimum Standards for Sewer Pipe Fittings, Coatings and Leakage Testing, and shall be enforced by the Authority through the permit process. For new wells placed in areas of existing sanitary sewers, the sewers in the Freshwater Lens Zone must be pressure tested at each joint, grouted and sealed with proof of testing provided to the Authority prior to release of the well for service.
  - (b) Exfiltration Systems. No new exfiltration system shall be constructed in the Freshwater Lens Zone.
  - (c) Retention/Detention Ponds. New retention or detention ponds located within the freshwater lens zone shall comply with the criteria described in the Authority criteria. These criteria are enforced through the permitting process.
  - (d) Percolation Ponds. New percolation ponds for domestic wastewater treatment located within the freshwater lens zone shall comply with the requirements for separation from public drinking water wells set forth in this code and enforced by the Authority.
  - (e) Land Application of Domestic Wastewater Effluent. Land application of domestic effluent or sludge within the freshwater lens zone shall comply with the requirements for separation from public drinking water wells as set forth in this Code and enforced by the Authority. In addition, the operator shall provide evidence that the wastewater has been treated to the level as required by the Authority.
  - (f) Onsite Sewage Disposal Systems. New onsite sewage disposal systems located within the freshwater lens zone shall comply with

Permit Conditions for the Freshwater Lens

the requirements for maximum sewage loading and separation from public drinking water wells as set forth by the Authority.

**Prohibitions and Restrictions** 35. Prohibited Activities. The use, handling, production, and storage of regulated substances associated with nonresidential activities is prohibited in the Freshwater Lens Zone, except as provided under the general exemptions, or as set forth in the Pollution Prevention & Waste Management bye-laws and other prescribed regulations and appropriate national registries, and conditions of environmental operating permit.

**Revocation and Revision of Permits and Exemptions** 36. Any permit issued under the provisions of this bye-law shall not become vested in the permittee. The Authority may revoke any permit issued by it by first issuing a written notice of intent to revoke (certified mail return receipt requested, or hand delivery) if it finds that the permit holder:

- 1. Has failed or refused to comply with any of the provisions of this bye-law, including but not limited to permit conditions and bond requirements of any Bond Required, herein;
- 2. Has submitted false or inaccurate information in this application;
- 3. Has failed to submit operational reports or other information required by this bye-law; or
- 4. Has refused lawful inspection under the prescribed regulations.
- 37. The written notice of intent to revoke or revise shall contain the following information:
  - 1. The name and address of the permittee, if any, and property owner, if different;
  - 2. A description of the facility which is the subject of the proposed revocation or revision;
  - 3. Location of the spill, if any;
  - 4. Concise explanation and specific reasons for the proposed revocation or revision; and
  - 5. A statement that "Failure to appeal a notice of intent to revoke or revise, within 20 days, after the date upon which the permittee receives written notice".

#### PART VI GENERAL

Power to enter land

Notice

38. (1) An authorised person may enter the land of concern at any reasonable time

|         | to— (a) inspect or survey the land or works on the land; or (b) do everything necessary, including, for example— (i) measuring, photographing or filming anything on the land; or (ii) taking samples of or from anything on the land.                                                                                                                                    |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | <ul> <li>(2) The power to enter land includes power to— <ul> <li>(a) re-enter the land; and</li> <li>(b) remain on the land for the time that is reasonable and necessary for the purpose of the entry; and</li> <li>(c) take assistants, vehicles, materials, equipment or things that are reasonable and necessary for the purpose of the entry.</li> </ul> </li> </ul> |
| Penalty | 39. (1) In cases of non-compliance with these regulations or other provisions the Authority may revoke any permit issued pursuant to these regulations or exercise other enforcement authorities provided for in the bye-laws.                                                                                                                                            |
|         | (2) Any person who contravenes or fails to comply with any provision of these Bye laws shall be guilty of an offence against the Act and shall be liable on summar                                                                                                                                                                                                        |

(2) Any person who contravenes or fails to comply with any provision of these Byelaws shall be guilty of an offence against the Act and shall be liable on summary conviction to a fine not exceeding five thousand Bahamian dollars (B\$5000.00) or imprisonment not exceeding three months or both, and in the case of a continuing offence to a further fine not exceeding five hundred Bahamian dollars (B\$500) for each day or part thereof during which the offence continue after a conviction is first obtained.

#### **SCHEDULE 1**

# LIST OF NATIVE, NON-NATIVE INVASIVE AND PROTECTED TREE SPECIES FOR THE BAHAMAS

#### 1. PROHIBITED INVASIVE NON-NATIVE VEGETATION

- a. Australian Pine, (Casuarina equisetifolia)
- b. Ficus
- c. Suckering Australian Pine, (Casuarina glauca)
- d. Brazilian pepper (Schinus terebinthi folius)
- e. Melaleuca (Melaleuca quinquenervia)
- f. Scaevola (Scaevola taccada)
- g. Monkey Tamarind (*Mucuna pruriens*)

#### 2. INVASIVE NON-NATIVE VEGETATION COMMON

- *a.* Rosary pea *Abrus precatorius*
- b. Asparagus fern Asparagus densiflorus
- c. Poor man's Orchid, Orchid tree Bauhinia variegate
- d. Australian Pine, Beef Wood Casuarina equisetifolia
- e. Suckering Australian pine Casuarina glauca
- f. Day jessamine Cestrum diurnum
- g. Lather leaf Colubrina asiatica
- h. Winged yam Dioscorea alata
- i. Air potato Dioscorea bulbifera
- *j.* Water hyacinth *Eichhornia crassipes*
- k. Surinam cherry Eugenia uniflora
- l. Azores jasmine, Brazilian jasmine Jasminum fluminensis

- *m*. Lantana, Shrub verbena, angel lips, big sage, black sage, white sage, prickly lantana, Lantana camara
- n. Jumbey Leucaeuna glauca
- o. Cat's claw vine Macfadyena unguis-cati
- p. Sapodilla Manilkara zapota
- q. Melaleuca, paper bark Melaleuca quinquenervia
- r. Asian sword fern Nephrolepis multifora
- s. Torpedo grass Panicum repens
- t. Napier grass Pennisetum purpureum
- u. Scaevola, Half-flower, Beach naupaka,
- v. White inkberry, Hawaiian segrape, Asian Scaevola, Scaevola taccada
- w. Schefflera, Queensland umbrella tree Schefflera actinophylla
- x. Brazilian pepper, Bahamian holly Schinus terebinthifolius
- y. Arrow head vine Syngonium podophyllum
- z. Seaside mahoe, cork tree, Spanish cork Thespesia populnea
- aa. Wedelia Wedelia trilobata
- bb. Napier grass Pennisetum purpureum
- cc. Bay Rum Pimenta racemosa
- *dd.* Almond *Prunus amygdalus*
- ee. Castor Bean Ricinus communis
- ff. Mexican petunia Ruellia brittoniana
- gg. Schefflera, Queensland umbrella tree Schefflera actinophylla
- hh. Flame of the forest, African tulip tree Spathodea campanulata
- ii. Arrow head vine Syngonium podophyllum
- jj. Seaside mahoe, cork tree, Spanish cork Thespesia populnea
- kk. Star Jasmine Trachelosperumum jasminoides

ll. Wedelia, carpet daisy Wedelia trilobata

#### **3. PROTECTED TREE SPECIES**

- a. Red Cedar (Juniperus bermudiana)
- b. Lignum vitae (Guiacum sanctum)
- c. Rauwolfia (Rauwolfia nitida)
- d. Candlewood (Gochnatia ilicifolia)
- e. Mahogany (Swietenia mahagoni)
- f. Horseflesh (Lysiloma sabicu)
- g. Yellow Pine (Pinus caribea)
- h. Brasiletto (Caesalpinia vesicaria)
- i. Beefwood (Guapira obtusa)
- j. Bull Wood (Pera Bumeliifolia)
- k. Silk Cotton (Ceiba pentandra

#### 4. RECOMMENDED NATIVE SPECIES

- a. Buttonwood (Conocarpus Erectus)
- b. Silver Buttonwood (Conocarpus sericeus)
- c. Guanaberry (Byrosonima lucida)
- d. Mahogany (Sweitenia mahogany)
- e. Seagrape (Coccoloba uvifera)
- f. Sea oats (Uniola paniculata)
- g. Pitch Apple (Clusia rosea)

Source: The Bahamas Environment Science and Technology Commission and the Conservation and Protection of the Physical Landscape of the Bahamas (Chapter 260- Part VI) Act, 1997

#### **SCHEDULE 2**

The Tree Replacement Table shall apply to mitigation or restoration as follows:

| Tree Replacement Table                                      |              |
|-------------------------------------------------------------|--------------|
| Crown Spread of Tree or Diameter at 4.5 Feet<br>Above Grade | Replacements |
| 90 feet or greater or 27 inches or more                     | 9            |
| 60 -89 feet or 24 – 26 inches                               | 8            |
| 50 -59 feet or 21 -23 inches                                | 7            |
| 40 -49 feet or 18 - 20 inches                               | 6            |
| 30 - 39 feet or 15 - 17 inches                              | 5            |
| 20 – 29 feet or 12 -14 inches                               | 4            |
| 10 -19 feet or 9 -11 inches                                 | 3            |
| 5 -9 feet or 6 – 8 inches                                   | 2            |
| Less than 5 feet or less than 6 inches                      | 0            |

- 1. Replacement trees shall be at least 12 feet in height, two and one-half inches Diameter at Breast Height (DBH) {The diameter of a tree trunk measured at a point four and one-half feet above the ground} and consist of native vegetation, indigenous to the area, and of approved nursery quality. Field grown replacement trees shall be evaluated on a case-by-case basis for quality.
- 2. Replacement palms shall be at least 12 feet in height.
- 3. If the required replacement trees cannot to be purchased within 60 miles from the parcel, the Authority may approve an alternate replacement.
- 4. Replaceable Specimen Trees greater than 22 inches DBH shall be replaced with a tree of the same species and equal or greater DBH.
- 5. Replacement trees may be replaced with a contribution to the Natural Areas Stewardship Endowment Fund for the cost of the purchase and relocation of a like tree.

- 6. Monitoring time frames shall be established for mitigation and replacement vegetation, as needed.
- 7. Mitigation vegetation, other than trees, may be approved by the Authority providing the vegetation is native and indigenous to the area.

\_Freeport (Environmental Management and Protection) Bye-Laws.

#### FREEPORT BYE-LAWS FREEPORT (ENVIRONMENTAL MANAGEMENT AND PROTECTION) BYE-LAWS

| Title.          | 1. These Bye-laws may be cited as the Freeport (Environmental Management and Protection) Bye-laws.                                                                                                                                                                                                       |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interpretation. | 2.—(1) In these Bye-laws, unless the context otherwise requires: —                                                                                                                                                                                                                                       |
|                 | "the act" means the Freeport Bye-laws Act;                                                                                                                                                                                                                                                               |
|                 | "the authority" means the Port Authority;                                                                                                                                                                                                                                                                |
|                 | "basic environmental assessment" (or "BEA") means the study conducted<br>pursuant to these regulations in order to determine whether Category B<br>projects, as defined by these regulations, are environmentally<br>acceptable.                                                                         |
|                 | "bye-law" means a bye-law made and approved in accordance with the provisions of the Act;                                                                                                                                                                                                                |
|                 | "commence" means to initiate any physical activity, including among other<br>things, to clear vegetation, break ground or alter the environment in<br>any way;                                                                                                                                           |
|                 | "environment" means the natural, manmade or altered environment of air, land<br>and water (including the coastal water of the sea), natural resources or<br>any combination or part or interacting systems thereof;                                                                                      |
|                 | "environmental accident" means                                                                                                                                                                                                                                                                           |
|                 | (a) a release, spill or introduction, or threat thereof, of a polluting substance into the environment, other than in accordance with these Bye-laws;                                                                                                                                                    |
|                 | <ul><li>(b) an event or situation which, in the opinion of the Authority or a designated official, is likely to result in harm to the environment; or</li></ul>                                                                                                                                          |
|                 | <ul><li>(c) the environmental consequences of a naturally occurring event or situation such as a hurricane, flood, earthquake, or tsunami;</li></ul>                                                                                                                                                     |
|                 | "environmental emergency" means an environmental accident which creates an<br>immediate or imminent adverse effect or threat of such an effect<br>requiring prompt measures to be taken.                                                                                                                 |
|                 | "environmental impact assessment" (EIA) means a study identifying and<br>evaluating the likely impact of a proposed activity on the environment,<br>identifying and evaluating alternatives to that activity, and identifying<br>and evaluating potential means of mitigating the likely impacts of that |

activity, conducted pursuant to these regulations in order to determine whether Category A or B projects, as defined by these regulations, are environmentally acceptable;

- "environmental incident" means an event or an occurrence that has the potential to impact the environment, and may momentarily interrupt normal procedure or precipitate crisis. A repeat occurrence of the event may often result in a serious environmental accident.
- "environmental management plan" (EMP) is a plan drawn up by the Project Proponent outlining the environmental management measures that will be carried out during construction and implementation of the proposed project, in order to ensure that the proposed project is environmentally acceptable.
- "expanded environmental impact assessment" (or "EEIA") means the study conducted pursuant to these regulations in order to determine whether Category A projects, as defined by these regulations, are environmentally acceptable.
- "operate" means to use a facility or structure following the completion of its construction, erection or creation.
- "owner" in relation to any premises, means the person for the time being entitled to receive the rent of the premises, whether on his own account or as an agent or trustee or who would be so entitled if such premises were let;
- "polluter-pays-principle" means the principle that the company or person that causes the pollution or damage to the environment should pay for the cost of remedying the situation and/or provide compensation to those who have been affected by it.

"pollution" means the state resulting from the presence of a pollutant;

- "port area" means the entire land holdings granted through the Hawksbill Creek Agreement and subsequent amendments, regulated by the Authority.
- "proponent" means the principal advocate a person, entity, Government, Port Authority etc.- that proposes to undertake an activity;
- "sustainable management" means managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural well-being and for their health and safety while —
  - (a) sustaining the potential of natural and physical resources to meet reasonably foreseeable needs of future generations;
  - (b) safeguarding the life-supporting capacity of air, water, soil and ecosystems; and
  - (c) avoiding, remedying or mitigating any adverse effects on the

environment and human health.

#### PART 1: ENVIRONMENTAL MANAGEMENT

Responsibilities of the Authority
3.—(1) The Authority is mandated with the responsibility of ensuring the integrated protection of the environment of the Port Area and ensuring the sustainable management of natural resources.
(2) In carrying out its mandate under (1), it is the responsibility of the Authority to:
(a) develop environmental quality objectives, guidelines, codes of practice, best management practices and standards for the Port Area;
(b) develop and implement a system of project review and approval that will provide for the early, systematic, and detailed evaluation of the environmental implications of proposals within the Port Area;

- (c) monitor and regulate the actual and likely contamination or pollution from all sources to ensure compliance in all matters and activities relating thereto and establish minimum standards required for a clean and healthy environment;
- (d) initiate and coordinate the development of a plan for the prevention and response to environmental accidents and emergencies;
- (e) monitor the implementation of environmental agreements and/or plans entered into by licensees of the Port Authority;
- (f) investigate, and, when appropriate, develop, implement or cause environmental fees, levies and/or the taking out of insurance polices designed to recover from persons whose activities cause or are likely to cause damage to the environment some or all of the cost of preventive or restorative measures; and
- (g) enforce all requirements, regulations and other obligations under these Bye-laws.

#### PART II: ENVIRONMENTAL APPROVALS

Environmental Impact Assessment

4.- (1) Any proponent who wishes to embark on a project within the Port Area, which potentially has environmental impacts, may at the determination of the Authority be required to prepare an environmental impact assessment (EIA), which would be either an expanded environmental impact assessment or a basic environmental impact assessment depending on the category of project (A or B), in Schedule A. Such projects which may require an environmental impact assessment are listed, but not limited to, in Schedule B.

(2) Where a proponent is required to prepare an environmental impact assessment report, under the responsibilities described in section 3(2)(e), the Authority shall issue guidelines, and establish procedures for the preparation and review of an environmental impact assessment for all actions reasonably expected to have a significant impact on the environment of The Port Area.

(3) The proponent is responsible for submitting the proposed EIA consultant team for approval, who shall then prepare terms of reference that sets out the proposal and methods for carrying out the assessment of the environmental impacts of the undertaking, before commencing with the environmental impact assessment study.

(4) The Project Proponent shall prepare an EIA, which shall include an Environmental Management Plan (EMP) (see Schedule C for the general content of an EIA).

(5) The purposes of the Environmental Impact Assessment are to:

- (a) Support the Authority in achieving its desired environmental protection and sustainable development objectives, by ensuring that full information is available regarding the environmental implications of every development decision affecting the environment of the Port Area;
- (b) Ensure that environmental (including social, cultural, and socioeconomic) considerations are fully integrated into the planning process for all proposed projects; and
- (c) Enhance investment and development in the Port Area by
  - (i) providing a consistent, reliable, and transparent set of criteria defining environmentally acceptable projects;
  - (ii) providing a consistent, reliable, and transparent set of procedures with a finite duration, whereby proposed projects are vetted for environmental acceptability; and
  - (iii) providing assurance to prospective investors that all reasonable steps will be taken to protect the quality of the environment and thus their investment.

(6) Where the Authority requires the submission of an environmental impact assessment, the Authority shall not issue an environmental development permit to commence an activity until the assessment has been reviewed and a stamp of approval issued.

(7) The applicant shall deliver an environmental impact assessment to the Authority for approval and pay the prescribed application fee for review.

(8) The Authority shall, within 30 days of receiving the environmental impact assessment, decide if EIA administratively ---

- a. meets the requirements of the terms of reference checklist and is void of deficiencies; or
- b. does not meet the requirements of the EIA terms of reference checklist and has deficiencies.

c. The Authority shall, within 90 days of receiving the environmental impact assessment, advise the proponent: of any technical deficiencies, the need for additional supporting data, or if it is satisfactory.

(9) During the review period the Authority shall make the EIA/EMP available to the public, except those trade secrets or aspects subject to intellectual property rights.

(10) All public comments regarding the Environmental Impact Assessment (EIA) shall be submitted to the Authority within 30 days for consideration.

(11) The Authority may make its approval under subsection (4) subject to whatever conditions and requirements it determines to be necessary to protect the environment and ensure the sustainable management of natural resources.

Environmental Development Permit 5.- (1) Where a development activity requires the submission and approval of an EIA under section 4, proponents of such activities may not commence until the Authority has issued an environmental development permit.

(2) No person shall construct, alter, extend or replace any plant, structure, equipment, apparatus, mechanism or thing (except like for like replacement) that will or has the potential to have an adverse impact on the environment of the Port Area, including its natural resources and its ecological integrity and diversity, without first obtaining an environmental development permit, issued in accordance with this section by the Authority.

(3) An applicant under this section shall apply in the form approved by the Authority and shall pay the prescribed application fee.

(4) Where in the exercise of its discretion the Port Authority, upon being satisfied that the methods or devices or both to be used to prevent, control, monitor and report any adverse affects as defined in the EIA, are adequate to prevent or control such impacts, after the review period shall grant an environmental developing permit, or, if not so satisfied, shall refuse to grant the permit.

(5) Where the project is deemed as not having any environmental issues or the environmental impact of the project is unlikely to be adverse to warrant an EIA, within thirty (30) days of the review of the application the Authority shall issue in writing an environmental development permit with or without conditions attached.

(6) The environmental development permit shall state the conditions to which the proposed project will be subject. These may include, but are not limited to, the following:

(a) Environmental mitigation and management measures to be implemented by the Project Proponent during the development phases of the project.

- (b) Project Proponent's responsibility to implement the Environmental Management Plan which includes conditions established during the EIA review phase and as approved by the Authority, for the preconstruction/construction phase.
- (c) Authority's right to monitor and inspect the project site and Project Proponents activities of environmental relevance during the construction phase.
- (d) Period of time during which the environmental development permit will be in force.
- (e) Procedure to be followed in the event that the Project Proponent has not completed the development of the proposed project within the period of time indicated in (d).

(7) Under the environmental development permit, if the Authority proposes to cancel, suspend or amend the permit after a reasonable period of time for corrective measures to be taken, the Authority

- (a) may require, that in consultation with the applicant, set a reasonable time within which corrective action is to be taken by the applicant,
- (b) shall give the holder of the environmental developing permit:
  - (i) notice in writing of the proposed cancellation, suspension or amendment, and
  - (ii) the opportunity to make representations to him before the expiration of fourteen (14) days.
- (c) shall forthwith inform the holder of the environmental operating permit of his final decision, and shall specify the reason for the decision and, if applicable, the action required to be taken by the holder before the suspension may be removed.

Environmental Operating Permit 6.- (1) Where a project was required to submit an EIA or it falls under a category of prescribe regulations or codes of practice, the proponents of such activities may not commence until the Authority has issued an environmental operating permit.

(2) An applicant under this section shall apply in the form approved by the Authority and shall pay the prescribed application fee.

(3) Where in the exercise of its discretion the Port Authority, upon being satisfied that the methods or devices or both to be used to prevent, control, monitor and report any adverse affects as defined in the EIA, are adequate to prevent or control such impacts, after the review period shall grant an environmental operating permit, or, if not so satisfied, shall refuse to grant the permit.

(4) An environmental operating permit shall be subject to provisions of the regulations, codes of practices and standards as promulgated by the Authority may impose in order to protect the environment and ensure the sustainable management of natural resources and shall be valid for a period of five (5) years from the date of

issuance. Upon expiration of the EOP, the Authority may make such changes in the permit's conditions, as may be reasonably necessary to achieve the purpose of these regulations. The Authority shall notify the permit holder of any proposed changes in the EOP conditions at least sixty (90) days before the expiration date. Should the Authority fail either to reissue or revoke the EOP, the existing EOP shall remain valid.

(5) Where any environmental operating permit is granted subject to any conditions stated therein, in the case of any breach of any such condition(s), the Authority may serve notice on the owner which indicates that:

- (a) such action is deemed necessary to protect the environment or ensure the sustainable management of natural resources,
- (b) the holder has failed or is likely to fail to comply with any terms of the permit,
- (c) the holder has failed to submit any information, report or fee required under these Bye-laws or the regulations, or
- (d) the holder has committed an offence under these Bye-laws or the regulations.

(7) If the Authority proposes to cancel, suspend or amend an environmental operating permit after a reasonable period of time for corrective measures to be taken, the Authority.

- (a) may require that a holder of the environmental operating permit to supply plans, specifications and other information the Authority requests,
- (b) shall give the holder of the environmental operating permit:
- (c) notice in writing of the proposed cancellation, suspension or amendment, and
- (d) the opportunity to make representations to him before the expiration of fourteen (14) days.
- (e) shall forthwith inform the holder of the environmental operating permit of his final decision, and shall specify the reason for the decision and, if applicable, the action required to be taken by the holder before the suspension may be removed.

7.- (1) There shall be three classes of exemptions and variance:

(a) Exemptions and variances addressing sudden and unavoidable occurrences such as breakdown, malfunction, accident, bypass, upset or similar unanticipated situations resulting in actual or potential non-compliance of a permit;

(b) Exemptions and variances for conditions that routinely deviate from the EOP limits due to startup, shutdown, a temporary rate change, maintenance or other recurring transient activities; and

(c) Exemptions and variances addressing unique non-routined proposed activities resulting in actual or potential noncompliance with the EOP limits of a source.

(2) Sources meeting the description in subsection (1)-a shall not be considered to be in violation of their EOP limits if the following actions are taken:

Exemptions and Variances to permits

|                                                   | a. The Authority is notified of the discovery of the occurrence before the end of the following working day;                                                                                                                                                                                                                                                                     |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                   | b. Notification includes a description of the occurrence, the estimated duration and magnitude of the impact on compliance, measures being taken to minimize impacts on the environment; and                                                                                                                                                                                     |
|                                                   | c. The Authority considers the proposed actions to be reasonable.                                                                                                                                                                                                                                                                                                                |
|                                                   | (3) Sources meeting the description in subsection (1)-b shall be identified and described in the initial application for an EOP identify and describe applicable activities to the Authority. The source shall record the times, dates and durations of listed activities as they occur. Said records shall be maintained on site and should be made available to the Authority. |
|                                                   | (4) Sources meeting the description in subsection (1)-c shall make application to to the Authority in advance of the proposed writing and supply all necessary supporting information and data. The Authority shall make a determination of approval or denial of the application within 90 days.                                                                                |
|                                                   | In considering any class of exemption or variance, the Authority shall take into account<br>the safety and needs of all affected persons, the available technology, the economic<br>benefits and costs and the purposes of the act.                                                                                                                                              |
| Refusal of permits                                | 8- (1) Where the Authority has refused to grant an EDP, EOP or FEOP, the Authority shall provide written reason for the refusal.                                                                                                                                                                                                                                                 |
|                                                   | (2) A person who is dissatisfied with:                                                                                                                                                                                                                                                                                                                                           |
|                                                   | (a) the refusal of the Authority to issue a permit, or                                                                                                                                                                                                                                                                                                                           |
|                                                   | (b) the terms and conditions attached to the permit, or                                                                                                                                                                                                                                                                                                                          |
|                                                   | (c) the variation (amendment) of any terms and conditions contained in a permit, or                                                                                                                                                                                                                                                                                              |
|                                                   | <ul><li>(d) the finding by the Authority of a violation of the conditions of a permit or the time for correction of the violation, or</li></ul>                                                                                                                                                                                                                                  |
|                                                   | (e) the revocation of a permit.                                                                                                                                                                                                                                                                                                                                                  |
|                                                   | may appeal to the Authority within fourteen (14) days of being notified of such a decision.                                                                                                                                                                                                                                                                                      |
| Transitional<br>Environmental<br>Operating Permit | Facilities currently operating at the time of these regulations will obtain a transitional environmental operating permit (TEOP) with conditions, which may or may not require the submission of an EIA, necessary to obtain an EOP.                                                                                                                                             |
|                                                   | (2) The Authority shall issue a transitional environmental operating permit to an applicant under this section within fifteen (15) days of receipt of the application if the Authority is satisfied.                                                                                                                                                                             |
|                                                   |                                                                                                                                                                                                                                                                                                                                                                                  |

(3) An applicant under this section shall apply using the form approved by the Authority and shall pay the prescribed application fee.

Issue of further environmental operating permit 9.- (1) Where there is a proposed change to the project materials, processes, rates or standards of operation for which an environmental operating permit has been issued while the permit is still in force, the person who assumes responsibility of the project and/or its deviations shall apply for and obtain a further environmental operating permit for the whole or a part of the project.

(2) Proposed changes that do not exceed the limitation of the existing EOP should result in a notification to the Authority before implementing the change.

(3) The Authority shall issue a further environmental operating permit to an applicant under this section within thirty (30) days of receipt of the application if the Authority is satisfied.

(3) An applicant under this section shall apply using the form approved by the Authority and shall pay the prescribed application fee.

#### PART III: ENVIRONMENTAL MONITORING AND INSPECTIONS

Environmental 10.- (1) The Authority shall establish a monitoring/inspection programme of the Monitoring and operations of any project, company, or development, which existed prior to the coming Inspections into effect of these Bye-laws, which requires EOP and TEOP (2) The Authority shall establish a monitoring/inspection programme of any new project, company, or development, which requires an EDP and/or EOP. (3) The Authority shall determine the level of monitoring and reporting required of existing and new operations. (4) The Authority shall be entitled to charge the developers, owners or occupiers as the case may be of the development and/or facilities within the Port Area in respect of monitoring and inspecting. If in monitoring the operations, the Authority determines that the project is not (5) in compliance with the EDP or EOP, the Authority shall notify the developer, owner or occupier of the following:

- (a) The deficiencies identified in the development/operation; and
- (b) The fact that the EDP/EOP can be suspended, revoked or canceled until the project is brought into full compliance.

(6) The developer, owner or occupier may address the deficiencies in the development/operation identified by the Authority and request that the Authority conduct a new inspection and review.

### PART IV: ENVIRONMENTAL INCIDENTS, ACCIDENTS AND EMERGENCIES

| Environmental<br>Emergency<br>Programme        | 11 In the exercise of the responsibilities described in section 3(2)(c), the Authority shall develop a programme in conjunction with its developers, owners and occupiers, for efficient, coordinated and effective action to prevent and minimize adverse environmental impacts from environmental incidents, accidents and emergencies in The Port Area.                               |  |  |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Obligation to<br>Notify and<br>Minimize Impact | 12.—(1) Where there occurs an environmental incident, accident or emergency or where there is the potential for an environmental incident, accident or emergency the Authority should be notified as soon as possible. In these circumstances stated above the developers, owners, occupiers shall                                                                                       |  |  |
|                                                | <ul> <li>(a) notify the Authority;</li> <li>(b) take all reasonable measures consistent with the protection of the environment and human health and safety to prevent, repair, mitigate or reduce the adverse effects and extent of the incident; and</li> <li>(c) make a reasonable effort to notify any member of the public who may be adversely affected by the incident.</li> </ul> |  |  |
|                                                | (2) Where there are significant local and/or national implications within or beyond the Port Area, affecting the environment, the Authority will also notify Government as to the type, extent and the remedial action(s) taken to address the environmental accident or emergency.                                                                                                      |  |  |
|                                                | (3) Subsection (1) applies to any person who                                                                                                                                                                                                                                                                                                                                             |  |  |
|                                                | <ul><li>(a) owns or has charge, management or control of a substance immediately before the incident, accident or emergency; or</li><li>(b) causes or contributes to the incident, accident or emergency.</li></ul>                                                                                                                                                                      |  |  |
| Power to Act<br>and to Recover<br>Costs        | 13.—(1) Where any person fails to take any measures required under section 10, the Authority may take those measures or cause them to be taken.                                                                                                                                                                                                                                          |  |  |
|                                                | <ul><li>(2) The Authority may recover the costs and expenses of any incidentals to any measures under subsection (1) from any person referred to in section 10 subsection (3).</li></ul>                                                                                                                                                                                                 |  |  |
|                                                | (3) In matters of accidental pollution risks, the Polluter-Pays Principle implies that the operator of a hazardous installation should bear the cost of reasonable measures to prevent and control accidental pollution from that installation.                                                                                                                                          |  |  |
| Liability of<br>Owner                          | 14 Where the person or entity who owns or has the charge, management or control of a substance or an event immediately before an environmental accident or emergency, is liable:                                                                                                                                                                                                         |  |  |

- (a) for restoring any part of the environment damaged by or during the accident; and
- (b) for all reasonable costs and expenses incurred by the Authority in respect of measures taken to prevent, repair, remedy or minimize the damage resulting from the accident or emergency.

#### PART V: ENVIRONMENTAL INFORMATION AND PUBLIC AWARENESS

15.—(1) The Authority is authorized under these Bye-laws to collect information, by means of voluntary surveys, questionnaires, inquiries, and other similar means, for the purpose of conducting research, creating an inventory of data, formulating objectives, guidelines, codes of practice, and reporting on the state of the environment, under these Bye-laws.

16.—(1) The Authority shall encourage and cause scientific, technical and management research on environmental issues and topics, including, in particular, ecological processes, development of measures for the management, recovery, and protection of protected areas and species of their habitats, assessments of the effectiveness of measures taken to implement management and recovery plans, monitoring programmes, and assessments of the archeological, historical and cultural heritage of the Port Area.

17.—(1) In the exercise of the responsibilities described in section 3(2)(b)(iii), the Authority shall develop programmes for public information, education, and training to promote basic environmental understanding and awareness and to promote awareness of and compliance with the environmental impact assessment programme, as well as other environmental standards, guidelines, and regulations.

#### PART VI: ENFORCEMENT

18.—(1) The Authority or any person authorized in writing by the Authority may during reasonable hours enter any premises for the purpose of —

- (a) ascertaining whether there is or has been in connection with the premises any contravention of the provisions of these Bye-laws or any regulations made thereunder and examine the premises and take away samples of any thing by means of or in relation to which he believes any provision of these Bye-laws has been contravened;
- (b) ascertaining whether or not circumstances exist which would authorize or require the Authority to take any action or execute any work under these Bye-laws or any guidelines or regulations made thereunder;
- (c) taking any action, performing any function or executing any thing authorized or required to be done under these Bye-laws or any guidelines or regulations made thereunder; or generally examining and inspecting the premises.

19.--(1) Any person who contravenes the provisions of these or any other

Scientific, Technical and Management Research

Information

Gathering

Public Information, Education, and Training

Entry on Premises by Authorized Persons

Offences and

Penalties

regulations in conducting the activities specifically permitted by this regulation shall report in writing each and every such occurrence to the Authority forthwith an such person must immediately take appropriate corrective measures either of its own volition or upon being specifically directed to do so by the Authority so as to correct the contravention with a period not to exceed twenty-one (21) days unless that period of time is expressly enlarged by the Authority\_

(2) Any person who fails to correct any breaches or comply with any provisions of these Bye-laws shall be guilty of an offence against these Bye-laws and shall be liable on summary conviction to a fine not exceeding five thousand Bahamian dollars (B\$5,000) or imprisonment for a period not exceeding three months or both, and in the case of a continuing offence to a further fine not exceeding five hundred Bahamian dollars (B\$500) for each day or part thereof during which the offence continues after a conviction is first obtained.

#### SCHEDULE A

### EXAMPLE CHARACTERISTICS OF CATEGORY A PROJECTS

This Schedule contains examples of project characteristics or potential impacts that would ordinarily result in the categorization of projects as Category A or Category B. This is not intended to be an exhaustive or definitive list of characteristics that make proposed projects Category A or B projects. Project categorization pursuant to the EIA regulations is highly specific to each proposed project, and must be conducted on a case-by-case basis.

### Category A

Category A projects are defined as proposed projects that have the potential for several, severe, and widespread environmental impacts. A project would ordinarily be deemed a Category A project if it has the potential for any two or more of the following, or if it involves a severe case of one of the following:

- (a) Irrevocably commit, degrade, or destroy any unique or limited environmental resource, Conflict with adopted environmental objectives of the Authority of The Port Area or the environmental plans and goals of the community where it is located;
- (b) Affect rare or endangered species of animals or plants or the habitats of the species;
- (c) Interfere with the movement of any resident or migratory fish or wildlife species;
- (d) Diminish habitat for fish, wildlife or plants, or result in the conversion of hitherto undisturbed natural or wild terrain for human use;
- (e) Alter or destroy a coral reef or have an indirect impact on the health of a coral reef (e.g., degrade water quality through siltation);
- (f) Destroy a relatively large portion of sea grass or other marine habitat;
- (g) degrade surface water quality, including fresh and saline waters, or involve the release of of pollutants to surface waters;
- (h) Cause flooding, erosion, or siltation;
- (i) Contaminate a public water supply;
- (j) degrade or deplete ground water resources, or involve the release or cause the percolation/leaching of contaminants to any ground water resource;
- (k) Interfere substantially with ground water recharge;
- (l) degrade air quality, or involve release of amounts of atmospheric pollutants which can endanger human health;
- (m) Disrupt or adversely affect a prehistoric or historic archaeological site or property of historic or cultural significance to a community or ethnic or social group or a paleontological site except as part of a scientific study;
- (n) Induce appreciable growth or concentration to an existing population;
- (o) Extend a sewer trunk line with capacity to serve new development;
- (p) Disrupt or divide the physical arrangement of an established community;
- (q) Displace a large number of people;
- (r) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system;
- (s) Conflict with established recreational, educational, religious or scientific uses of an area;
- (t) Have a demonstrable negative aesthetic effect;

- (u) Increase the ambient noise levels for adjoining areas;
- (v) Create a potential public health hazard or involve the use, production or disposal of materials that pose a hazard to people or animal or plant populations in the area affected;
- (w) Expose sensitive receptors to pollutant concentrations via any medium or pathway;
- (x) Encourage activities that result in the use of large amounts of water, or energy;
- (y) Generate large amounts of solid waste or any significant amount of litter;
- (z) Convert prime agricultural land to nonagricultural use or impair the agricultural productivity of prime agricultural land;
- (aa) Convert important recreational or tourism areas to other uses, or impair the environmental quality of recreational or tourism areas;
- (bb) Convert prime fisheries areas to uses not consistent with the function of the area as a fishery; or impair the productivity of prime fisheries areas;
- (cc) Interfere with emergency response plans or emergency evacuation plans.

### Category B

Category B projects would ordinarily be deemed a Category B project if it has the potential for any of the following:

- (a) Require redevelopment of land in an urban or area or area already under intensive human use, where the only issues are minor impacts to the utility system and local traffic;
- (b) Have minor impacts to the movement of any resident or migratory fish or wildlife species;
- (c) Have a relatively small impact on habitat for fish, wildlife or plants;
- (d) Impact a relatively small area of sea grass or other marine habitat;
- (e) Comply with water quality and wastewater release standards;
- (f) Induce only minor growth or concentration of population;
- (g) Displace a small number of people;
- (h) Cause only a minor increase in traffic in relation to the existing traffic load and capacity of the street system;
- (i) Avoid or cause only minor negative aesthetic effect;
- (j) Increase the ambient noise levels for adjoining areas to a minor extent;
- (k) Use, produce, store or dispose of small amounts of materials that pose a hazard to people or animal or plant populations in the area affected;
- (l) Involve the release of contaminants of relatively low human or ecological toxicity to a single medium.

### **SCHEDULE B**

This Schedule contains only examples of projects or activities which have characteristics that may impact the environment, therefore potentially requiring an environmental impact assessment and/ or an environmental operating permit, these include:

### A. AIRPORTS AND PORT FACILITIES

- 1 An airport (including its runway and the development and activities related to aircraft maintenance, repair, fueling and fuel storage, engine testing or air cargo handling).
- 2 A helipad within existing or planned residential development.
- 3 A container terminal (including its container backup facility).
- 4 A public cargo working area.
- 5 A container backup area, container storage, container handling or container packing area (including a container vehicle parking area)
- 6 A facility for ship building or ship repairing yard.

# **B. RECLAMATION, HYDRAULIC AND MARINE FACILITIES, DREDGING AND DUMPING**

- 1 Reclamation works (including associated dredging works).
- 2 Creation of a marina
- 3 Stockpiling of dredged material

### C. ENERGY SUPPLY

- 1 Public utility electricity power plant.
- 2 Public utility gas generation plant.

#### **D. WATER EXTRACTION AND WATER SUPPLY**

- 1 A primary reservoir.
- 2 Water treatment works.

#### E. SEWAGE COLLECTION, TREATMENT, DISPOSAL AND REUSE

1 All sewage disposal or treatment facilities, other than domestic, on-site facilities.

### F. WASTE STORAGE, TRANSFER AND DISPOSAL FACILITIES

- 1 A landfill for waste
- 2 A refuse transfer station
- 3 A waste disposal facility (excluding any refuse collection point), or waste disposal activity, for---
  - refuse or hazardous waste

#### G. UTILITY PIPELINES, TRANSMISSION PIPELINES AND SUBSTATIONS

- 1 An electricity substation and transmission line.
- 2 A submarine gas pipeline or submarine oil pipeline.

### H. WATERWAYS AND DRAINAGE WORKS

### I. MINERAL EXTRACTION

- 1 An oil or gas extraction activity.
- 2 A mining operation.
- 3 A quarrying or quarry rehabilitation.

### J. INDUSTRIAL ACTIVITIES

- 1 An industrial estate.
- 2 A brewery works.
- 3 A tannery or leather finishing factory
- 4 A metallurgical works
- 5 A cement works or concrete batching plant
- 6 A chemical or biochemical plant
- 7 An oil refinery
- 8 A petro-chemical plant
- 9 A sand depot
- 10 A bulk chemical storage facility

### K. STORAGE, TRANSFER AND TRANS-SHIPMENT OF FUELS

- 1 A storage, transfer and trans-shipment of liquefied petroleum gas facility
- 2 A storage, transfer and trans-shipment of liquefied natural gas facility
- 3 A storage, transfer and trans-shipment of oil facility

### L. AGRICULTURE AND FISHERIES ACTIVITIES

### M. TOURIST AND RECREATIONAL DEVELOPMENTS

- 1 A major recreational or tourism development, including developments which consist of changing the use of land so that it is used for recreational or tourism purposes.
- 2 A high density residential component (hotels, condominiums, yachts etc.).
- 3 A marina designed to provide moorings or dry storage and fueling services.
- 4 An outdoor golf course and all managed turf areas.
- 5 An outdoor sporting facility and/or amusement park

### N. RESIDENTIAL AND OTHER DEVELOPMENTS

1 Subdivisions – major residential or recreational developments

### **DECOMMISSIONING PROJECTS**

- 1. Airports, including fueling and fuel storage, the aircraft maintenance and repair facilities.
- 2. An oil refinery.
- 3. A municipal, chemical or clinical waste incinerator.
- 4. A public utility---electricity power plant or gas generation plant.

### **SCHEDULE C**

#### **General Contents of Environmental Impact Assessment Report**

An environmental impact assessment report must be prepared in accordance with the terms of reference issued by the Authority and shall include the following information unless otherwise directed:

(a) a description of the proposed activity and an analysis of the need for the activity;

(b) an analysis of the site selection procedure for the proposed activity, including a statement of the reasons why the proposed site was chosen and a consideration of alternative sites;

(c) an identification of existing baseline environmental conditions and areas of major concern that should be considered;

(d) a description of potential positive and negative environmental, social, economic and cultural impacts of the proposed activity, including cumulative, regional, temporal and spatial considerations;

(e) an analysis of the significance of the potential impacts identified under clause (d);

(f) the plans that have been or will be developed to mitigate the potential negative impacts identified under clause (d);

(g) an identification of issues related to human health that should be considered;

(h) a consideration of the alternatives to the proposed activity, including the alternative of not proceeding with the proposed activity;

(i) the plans that have been or will be developed to monitor environmental impacts that are predicted to occur and the plans that have been or will be developed to monitor proposed mitigation measures;

(j) the contingency plans that have been or will be developed in order to respond to unpredicted negative impacts;

(k) the plans that have been or will be developed for waste minimization and recycling;

(1) the manner in which the proponent intends to implement a program of public consultation in respect of the undertaking of the proposed activity and to present the results of that program;

(m) the plans that have been or will be developed to minimize the production or the release into the environment of substances that may have an adverse effect; and

(n) any other information that the Authority considers necessary to assess the proposed activity.

\_Freeport (Pollution Prevention and Waste Management ) Bye-Laws.

### FREEPORT BYE-LAWS FREEPORT (POLLUTION PREVENTION AND WASTE MANAGEMENT) BYE-LAWS

#### PART 1

| Title          | 1. These Bye-laws may be cited as the Freeport (Pollution Prevention and Waste Management) Bye-laws.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interpretation | 2. In these Bye-laws, unless the context otherwise requires -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                | " the act" means the Freeport Bye-laws Act;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                | "acutely hazardous waste" is such category of waste considered exceptionally<br>toxic as it is fatal to humans in low doses;                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                | "ambient air" means the unconfined portion of the atmosphere: open air or<br>surrounding air. Generally the air to which the general population would be<br>exposed;                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                | "ambient water" means surface or ground water, which surrounds or encompasses the Port Area;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                | "ambient soil" means the undisturbed soil present in the environment to which<br>the general population would be exposed;                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                | "the authority" means the Port Authority;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                | "background" means the ambient condition in the absence of the activity or<br>discharge under consideration, based on the best scientific information<br>available to the Authority;                                                                                                                                                                                                                                                                                                                                                                                                  |
|                | "COD" means chemical oxygen demand;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                | "contaminant or pollutant" means any solid, liquid, gas, odor, heat, sound,<br>vibration, radiation or combination of any of them resulting directly or<br>indirectly from the activities of man which may impair ecosystem<br>functioning; impair the quality of the natural environment for any use that<br>can be made of it; cause injury or damage to property or to plant or animal<br>life; cause harm or discomfort to any person; adversely affect the health or<br>impair the safety of any person; or render any property or plant or animal<br>life unfit for use by man; |
|                | "disposal facility" means a facility or part of a facility at which hazardous waste<br>or solid waste is intentionally placed into or on any land or water, and at<br>which waste will remain after closure;                                                                                                                                                                                                                                                                                                                                                                          |
|                | "effluent" means liquid flowing out of a system, such as a discharge of liquid<br>waste from industrial processes or water leaving a sewage treatment plant;                                                                                                                                                                                                                                                                                                                                                                                                                          |

- "environment" means the natural, manmade, or altered environment of air, land, and water (including the coastal water of the sea) or any combination or part or interacting systems thereof) as defined in the Act;
- "environmentally sound management of hazardous wastes and other wastes, pollutants and contaminants" means taking all practicable steps to ensure that hazardous wastes and other wastes, pollutants and contaminants are managed in a manner that will protect human health and the environment against the adverse effects which may result from such wastes, pollutants and contaminants;
- "five day BOD" means biochemical oxygen demand as measured over five days;
- "generator" means any person whose activity produces hazardous waste or solid waste, or, if that person is not known, the person who is in possession and/or control of those wastes;
- "groundwater" means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil;
- "hazardous materials" substances which have hazardous characteristics such as: flammable, corrosive, reactive, toxic, radioactive, poisonous, carcinogenic or infectious. These materials are considered hazardous because they present a potential risk to humans and/or the environment
- "hazardous waste" means waste which, because of its quantity, concentration or characteristics, poses a present or potential hazard to human health or the environment. Such wastes belonging to any category listed in Schedule 3 of this regulation.
- "hazardous waste management facility" means a site or facility for the collection, transport, storage, treatment, or disposal of hazardous wastes which is permitted by the Authority to operate for this purpose;
- "inland waters" means non-flowing or flowing surface water bodies which do not meet the definition of a bay, estuary or open water and are not fully contained within manmade structures;
- "liquid waste" means sewerage and human body wastes and other organic wastes and waste water from toilets and other receptacles intended to receive body wastes; drainage from medical premises, such as hospitals, sick bays, dispensaries, via baths, wash basins and the like fixtures; drainage from places where animals are held, reared, or slaughtered; drainage and waste water from domestic, industrial, commercial, and agricultural operations, including hotels, resorts, marinas, feedlots, and facilities for the manufacture and storage of chemicals; and other waste waters;

"management" means the collection, transport, and disposal of hazardous waste or solid waste, including after-care of disposal sites;

"mixing zone" means one of the following:

- (a) A volume of surface water containing the point or area of discharge and within which an opportunity for the mixture of wastes with receiving surface waters has been afforded; or
- (b) For ocean discharge, the zone extending from the sea's surface to seabed and extending (1) laterally to a distance of 100 meters in all directions from the discharge point(s), or (2) to the boundary of the zone of initial dilution as calculated by a plume model approved by the Authority, whichever is greater; or
- (c) The volume of surface water determined by the discharger and approved by the Authority to be appropriated for that location.
- "notice of intent" means a specific submission indicating that the applicant intends to operate or maintain emissions or discharges of contaminants or pollutants in accordance with the regulations
- "operator" means the person responsible for the overall operation of a hazardous waste or solid waste management facility;
- "other waste" means a liquid waste or a solid waste;
- "person" means any individual, public or private entity, company partnership firm association or society of persons;
- "port area" as defined in the Interpretation and General Clauses Act of the Statute Laws of The Bahamas;
- "pollution" means undesirable state of the natural environment being contaminated with harmful substances as a direct or indirect consequence of human activities
- "regulated substances" means those deleterious substances or contaminants, including degradation and interaction products which, because of quality, concentration, or physical, chemical (including ignitability, corrosivity, reactiveness and toxicity), or infectious characteristics, radioactivity, mutagenicity, carcinogenicity, teratogenicity, bioaccumulative effect, persistence (non-degradability) in nature, or any other characteristic, may cause significant harm to human health and environment (including surface and groundwater, plants, and animals).
- "release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment;

- "solid waste" means ashes, garbage, refuse, litter and other discarded solid material resulting from domestic, industrial, commercial and agricultural operations and from community activities but does not include sewage;
- "storage" means the holding of hazardous or non- hazardous waste or materials for a temporary period, at the end of which the waste is treated, disposed of, or stored elsewhere:
- "surface water" means water upon the surface of the earth, whether contained in bounds created naturally or artificially or diffused;
- "Total Suspended Solids" referred to as TSS, is a measure of the settleable solids and non-settleable solids.
- "transport" means the movement of hazardous or non-hazardous waste or material by any and all means, including air, rail, highway, or water;
- "treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amendable for storage, or reduced in volume.

#### PART 2

#### POLLUTION PREVENTION PLANS

3. (1) Every person or facility involved in operations or activities which generates or may generate large quantities of pollutants, hazardous waste, and toxic substances shall be required by the Authority to produce a pollution prevention plan. Once any one threshold identified below is exceeded, a Pollution Prevention Plan shall be required, these include if a:

- a. facility ships off site, for purposes other than recycling, 26 pounds or more cumulative total pollutants, hazardous wastes and toxic substances in a calendar year;
- b. facility ships off site, for purposes other than recycling, an average of 2.2 pounds or more per month cumulative total of acutely hazardous wastes in a calendar year;
- c. facility generates an average of 2.2 pounds per month of acutely hazardous waste or an average of 2,200 pounds per month of hazardous waste in a calendar year. exclusive of an episodic. accidental or remediation related release;
- d. facility manufactures or processes more than 25,000 pounds or otherwise used more than 10,000 pounds of a toxic substance in a

Pollution Prevention Plan

calendar year; and

- e. facility uses in excess of 10,000 pounds of a toxic substance in a calendar vear.
- (2) The plan:
  - a. may be submitted as a part of the Environmental Management Plan or System;
  - b. should be prepared for the purpose of determining and assessing preventive or control measures in respect of a substance or group of substances;
  - c. shall address:
    - Pollution prevention principles and procedures in the facilities i. design, operations and in the event of decommissioning activities.
    - ii. Specific performance goals for the prevention of pollution, including an explanation of the rationale for each performance goal. The plan must include a goal for the facility and may include goals for individual production processes.
    - iii. A written policy setting forth management and corporate support for the pollution prevention plan and a commitment to implement the plan to achieve the plan goals. A statement of the plan's scope and objectives
    - iv. An analysis identifying pollution prevention opportunities to reduce or eliminate toxic substance releases and hazardous waste generation.
    - v. Control mechanisms utilizing best available technologies to minimize pollution.
    - vi. Management of the cumulative impacts of multiple sources of pollution.

**Requirement** for 5. (1) Every person who is required to prepare a pollution prevention plan in respect of environmental protection measures shall keep a copy of the plan at the place in the prevention plans Port Area to which the plan relates.

**Declaration of** Implementation of the Plan

pollution

6. (1) Every person who is required to implement a pollution prevention plan in respect of environmental protection shall file within 30 days after the completion of the implementation of the plan, confirm the same in a written declaration to the Authority.

### PART 3

### AMBIENT LIMITS

| Surface Water<br>Quality Criteria | 7. The following ambient water criteria are hereby established for surface waters of The Port Area.                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
|                                   | (1) Qualitative standards:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
|                                   | <ul> <li>(a) Materials that will settle to form objectionable sludge or bottom<br/>putrescent deposits or otherwise create a nuisance;</li> </ul>                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |
|                                   | (b) Substances in amounts sufficient to produce an unnatural taste in<br>the water or detectable off-flavor in the flesh of fish or in amounts<br>sufficient to produce an objectionable color; and                                                                                                                                                                                                                                                                                                                           |  |  |  |
|                                   | (c) Floating debris, oil grease, scum or other floating materials.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |
|                                   | <ul> <li>(2) Quantitative standards:</li> <li>(a) Quantitative standards for toxic pollutants for surface water quality criteria are provided in Schedule 1.</li> <li>(b) The freshwater standards apply where the dissolved inorganic ion</li> </ul>                                                                                                                                                                                                                                                                         |  |  |  |
|                                   | concentration is less than 0.5 parts per thousand; saltwater standards apply above 0.5 parts per thousand.                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
|                                   | (3) In order to reduce a risk to public health or safety arising out of any violation or probable violation of these bye-laws, the Authority may post or order posted by any waters of The Port Area. Posting is the placement, erection, or use of a sign or signs warning people to stay out of, avoid contact with, avoid consumption from, and avoid using the water. This posting right shall not limit the Authority's powers to post or order posting in any other appropriate case or to take any enforcement action. |  |  |  |
| Ground Water<br>Quality Criteria  | <ul> <li>8. (1) The following ground water quality criteria are hereby established to protect the natural quality of groundwater from:</li> <li>(i) pollution or wastes directly from a subsurface discharge or by migrating water or fluid of a discharge;</li> </ul>                                                                                                                                                                                                                                                        |  |  |  |
|                                   | (ii) invasion by underground water of inferior quality as a result of well or exploration hole drilling or completion practices;                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |
|                                   | (iii) pollution which may result from aboveground facilities capable of causing or contributing to pollution; and                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |
|                                   | (iv) pollution which may result from surface mining operations.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |
|                                   | (2) Numeric standards for toxic pollutants for groundwater quality criteria are provided in Schedule 1                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |
| Air Quality<br>Criteria           | 9. The air quality criteria are established for the ambient air of The Port Area in Schedule 2. These air quality standards will be used in setting release limits for facilities.                                                                                                                                                                                                                                                                                                                                            |  |  |  |

Soil Quality Criteria 10. (1) No person shall discharge, cause or permit the discharge of any effluent, solid waste, sludge, crankcase oil from motor vehicles or vessels, battery acid in or on any soil or surface. Exceptions to this may be granted if the proponent can show an overriding benefit i.e. land treatment of biodegradable substances, compost and fertilization.

(2) The Authority may establish assessment criteria and soil quality standards for particular uses of land based on background concentrations or analytical detection limits for contaminants in soil, prescribed site-specific factors affecting contaminant mobility and receptor characterization. Generally, the assessment criteria are applied in identifying and classifying sites, to assess the general degree of contamination at a site, and to determine the need for further action.

### PART 4

#### PERMISSION TO DISCHARGE/EMIT INTO SURFACE WATER, GROUND WATER AND AIR

| Applicability for<br>Surface Waters<br>and<br>Groundwaters<br>Surface Water<br>Discharge<br>Permission | <ol> <li>These regulations apply to any new or existing institutional, commercial, or industrial firm or facility discharging effluent to the surface waters and groundwaters of the Port Area, and shall be valid for two years if there is no significant deviation to the discharge.</li> <li>The Authority shall consider applications for surface water discharge (SWD) to release liquid waste, contaminants or pollutants into the surface waters of The Port Area as a component of the Environmental Operating Permit.</li> </ol> |                                                                                                                                                                                                                                                         |  |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                                                                                                        | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                         |  |
| Application for<br>Surface Water<br>Discharge                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | cation for SWD permission shall be submitted in a form acceptable to consisting at a minimum of the following details:                                                                                                                                  |  |
|                                                                                                        | (1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | The name, mailing address, and location of the facility;                                                                                                                                                                                                |  |
|                                                                                                        | (2) The name and mailing address of the owner of the facility a name and mailing address of the operator of the facility, if diffe                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                         |  |
|                                                                                                        | (3)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | A description of the facility, including all activities or processes that generate liquid waste, contaminants or pollutants;                                                                                                                            |  |
|                                                                                                        | (4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | A description of each such waste, contaminant or pollutant generated<br>with an estimate of the annual quantity of each that is released into<br>the waters of The Port Area;                                                                           |  |
|                                                                                                        | (5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | A description of the location of all points from which liquid waste,<br>contaminants or pollutants are released from the facility into the<br>waters of The Port Area or released into tributaries/waterways<br>leading to the waters of the Port Area; |  |

- (6) A description of the waters i.e. the mixing zone of The Port Area into which the liquid waste, contaminant or pollutant is released, which should demonstrate that the mixing zone exemption will not produce a significant adverse effect on the established community of organisms in the receiving body of water or otherwise significantly impair any of the designated uses of the receiving body of water;
- (7) Details of the pretreatment processes being utilized i.e. Best Available Technologies of the stream being discharged;
- (8) The results of analyses conducted by the applicant demonstrating that the ambient limits established under Section 6 will be met by the permitted release. The Authority may require, as support for these analyses, the results of any or all of the following:
  - (i) Water quality surveys, including dilution studies, chemicalspecific receiving water quality analyses, receiving stream influent analyses;
  - (ii) Effluent dispersion models, dispersion models, and flow models;
  - (iii) Bio-surveys, including receiving stream benthic organism evaluations, studies of the presence/absence of certain species, ecosystem evaluations, studies of the proliferation of certain organisms, and bioaccumulation studies;
  - (iv) Toxicity reduction evaluations;
  - Sediment studies, including sediment deposition measurements, sediment dispersal characterizations, and chemical-specific sediment analyses;
  - (vi) Storm water pollution management studies and storm water pollution prevention plans; and
  - (vii) Monitoring plans.

14. The monitoring plan will include the following minimum requirements:

- (1) The method(s), testing points and frequency that will be used to sample and analyze discharges for the effluent limitations established;
- (2) The testing frequency for discharge analysis with minimum requirements of not less than annual monitoring for toxicity and quarterly monitoring for all other parameters; and
- (3) A programme for periodic evaluation of flora and fauna in the vicinity of the outfall for any point sources which discharge through ocean outfalls into open waters.
- Notice of Intent 15. (1) Facilities with existing discharges to surface water on the effective date of

Surface Water Discharge Monitoring Plans

these regulations shall submit the Notice of Intent within 90 days of the effective date of these regulations.

|                                             | surface water    | tition in the Notice of Intent, facilities with existing discharges to<br>on the effective date of these regulations shall be allowed a period of<br>nto compliance with discharge limitations and monitoring provisions.                                                                                                                       |
|---------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Surface Water<br>Discharge<br>Prohibitions  |                  | hs are prohibited from<br>discharging effluent that does not conform to or exceeds the effluent<br>limitations inside the mixing zone as indicated in these regulations<br>and/ or the Environmental Operating Permit;                                                                                                                          |
|                                             | (ii)             | ) using dilution as a method of treatment to achieve conformance with<br>the effluent limitations prior to discharge; and                                                                                                                                                                                                                       |
|                                             | (iii             | i) carrying out any work on any premises that may result in a new<br>source of effluent discharge or cause a material change in the<br>quantity or quality of the discharge from an existing source that<br>exceeds the permitted limits without prior written consent.                                                                         |
| Groundwater<br>Discharge<br>Permission      | to release/injec | uthority shall consider applications for groundwater discharge (GWD)<br>et contaminants or pollutants into the ambient groundwater of The Port<br>ponent of the Environmental Operating Permit.                                                                                                                                                 |
| Application for<br>Groundwater<br>Discharge |                  | plication for an GWD shall be submitted in a form acceptable to the sisting at a minimum of the following details:                                                                                                                                                                                                                              |
|                                             | (1)              | The name, mailing address, and location of the facility;                                                                                                                                                                                                                                                                                        |
|                                             | (2)              | The name and mailing address of the owner of the facility and the<br>name and mailing address of the operator of the facility, if different;                                                                                                                                                                                                    |
|                                             | (3)              | A description of the facility, including all activities or processes that<br>generate contaminants or pollutants harmful to the environment and<br>human health and a description of each such contaminant or<br>pollutant generated with an estimate of the annual quantity of each<br>that is released into the ambient air of The Port Area; |
|                                             | (4)              | A description of the location of all points from which contaminants<br>or pollutants are released/injected from the facility into the ambient<br>groundwater of The Port Area;                                                                                                                                                                  |
|                                             | (5)              | Details of the pretreatment process i.e. Best Available Technologies of the stream being discharged;                                                                                                                                                                                                                                            |
|                                             | (6)              | A description of the parameters to be utilized for a deep well injection for the discharge of effluent to the groundwater;                                                                                                                                                                                                                      |
|                                             | (7)              | A description of the numeric values of the elements in the effluent to be discharged.                                                                                                                                                                                                                                                           |

|                                              | (8) A description of the lateral and vertical limits of an aquifer or receiver, which shall be based on existing water use, ambient water quality and geologic and hydrologic characteristics of the aquifer or of the receiver;                                                                                                                                                    |  |  |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|                                              | (9) A description of the risk pollution and alteration of the quality of the groundwater from the discharge; and                                                                                                                                                                                                                                                                    |  |  |
|                                              | (10) The results of analyses conducted by the applicant demonstrating that<br>the ambient limits established under Schedule 2 will be met by the<br>permitted release. The Authority may require, as support for these<br>analyses, monitoring plans and other studies required by the<br>Authority to support a decision on the application.                                       |  |  |
| Groundwater<br>Discharge<br>Monitoring Plans | 19. The monitoring plan will include the following minimum requirements: The pollutants being monitored, number of monitoring stations, frequency and duration of monitoring or sampling, measuring or sampling techniques and analytical methods, if necessary are dependent upon the pollutant to be monitored and its emission rate.                                             |  |  |
| Notice of Intent                             | 20. (1) Facilities with existing discharges to the ambient groundwater on the effective date of these regulations shall submit the Notice of Intent within 90 days of the effective date of these regulations.                                                                                                                                                                      |  |  |
|                                              | (2) Upon petition in the notice of Intent, facilities with existing discharges to ambient groundwater on the effective date of these regulations shall be allowed a period of time to come into compliance with discharge limitations and monitoring provisions.                                                                                                                    |  |  |
| Groundwater<br>Discharge<br>Prohibitions     | <ul> <li>21. Persons are prohibited from:</li> <li>(i) Any discharge which shall result in any biological, hazardous, toxic or potentially toxic materials or substances, in concentrations or amounts which, based on the latest available scientific information and as determined by the Authority, will impair the quality of ambient groundwaters of the Port Area.</li> </ul> |  |  |
|                                              | (ii) Carrying out any work on any premises that may result in a new source<br>of effluent discharge or cause a material change in the quantity or quality<br>of the discharge from an existing source that exceeds the permitted limits<br>without prior written consent.                                                                                                           |  |  |
| Terms of the<br>Authorization                | 22. Based on the information provided, The Authority shall approve                                                                                                                                                                                                                                                                                                                  |  |  |
| for discharging<br>into the Ambient          | a. the place where the discharge may be made;                                                                                                                                                                                                                                                                                                                                       |  |  |
| Surface Waters<br>and<br>Groundwaters        | b. the method of discharge which may be used;                                                                                                                                                                                                                                                                                                                                       |  |  |
|                                              | c. the essential precautions which must be taken, paying particular attention to the nature and concentration of any substance in the effluent, the characteristics of the receiving environment and the proximity of water                                                                                                                                                         |  |  |

catchment areas, in particular those for drinking water;

- d. the maximum quantity of any such substance permissible in the effluent during one or more specified periods of time and the appropriate requirements as to the concentration of any such substance;
- e. the arrangements for monitoring effluents discharged into groundwater; and
- f. measures for monitoring groundwater, and in particular its quality.
- 23. An Environmental Operating Permit issued for any nonresidential activity that stores, handles, uses or produces any regulated substance with no intent to discharge to the surface water or groundwaters shall be subject to the following conditions:
- (e) Containment of regulated substances. Leak-proof trays under containers, floor curbing or other containment systems to provide secondary liquid containment shall be installed. The containment shall be of adequate size to handle all spills, leaks, overflows, and precipitation until appropriate action can be taken. The specific design and selection of materials shall be sufficient to preclude any regulated substance loss to the external environment. Containment systems shall be sheltered so that the intrusion of precipitation is effectively prevented. The owner/operator may choose to provide adequate and appropriate liquid collection methods rather than sheltering only after approval of the design by the GBPA. These requirements shall apply to all areas of use, production, and handling, to all storage areas, to loading and off-loading areas, and to above-ground and underground storage areas.
- (f) Emergency Collection Devices. Vacuum suction devices, absorbent scavenger materials or other devices approved by the GBPA, shall be present on-site or available within two hours by contract with a clean up company approved by the GBPA, in sufficient magnitude so as to control and collect the total quantity of regulated substances present. To the degree feasible, emergency containers shall be present and of such capacity as to hold the total quantity of regulated substances plus absorbent material. The presence of such emergency collection devices shall be certified in the operating permit application for existing activities. Such certification for new activities shall be provided to the GBPA prior to the presence of regulated substances on the site.
- (g) Emergency Plan. An emergency plan shall be prepared and filed with the operating permit application indicating the procedures which will be followed in the event of spillage of a regulated substance so as to control and collect all such spilled material in such a manner as to prevent it from reaching any storm or sanitary drains or surface waters or the ground.
- (h) Inspection. A responsible person designated by the permittee who stores, handles, uses or produces the regulated substances shall check on every day of operation, for breakage or leakage of any container holding the Regulated substances. Electronic sensing devices may be employed as part of the inspection process, if approved by the GBPA, and provided the sensing system is checked daily for malfunctions. The manner of daily inspection

Non-intent to discharge to surface water or groundwater

shall not necessarily require physical inspection of each container provided the location of the containers can be inspected to a degree which reasonably assures the GBPA that breakage or leakage can be detected by the inspection. Monitoring records shall be kept and made available to the GBPA at all reasonable times for examination.

- (i) Proper and Adequate Maintenance of Containment and Emergency Equipment. Procedures shall be established for quarterly, in-house inspection and maintenance of containment and emergency equipment. Such procedure shall be in writing; a regular checklist and schedule of maintenance shall be established; and a log shall be kept of inspections and maintenance. Such logs and records shall be available for inspection by the GBPA.
- (j) Reporting of Spills. Any spill of a regulated substance in excess of the non-aggregate quantity thresholds identified in the definition of "Regulated Substance" shall be reported by telephone to Department of Environmental Health Services and the appropriate public utility within one hour and to the GBPA within 24 hours of discovery of the spill. Clean-up shall commence immediately upon discovery of the spill. A full written report including the steps taken to contain and clean up the spill shall be submitted to the GBPA within 15 days of discovery of the spill.
- (k) Monitoring for Regulated substances in the Potable Water Wells. Arrangements shall be made with the appropriate public utility to establish a annual schedule of raw water analysis unless sampling results indicate contamination, in which case the GBPA shall require an increased sampling schedule. The analysis shall be for all substances which are listed on the operating permit. The analytical reports shall be prepared by a certified laboratory, certified for the applicable analyses. It shall be the responsibility of the public utility to provide for the sampling and analyses but the cost shall be borne by the permittee or those permittees on a pro-rata basis as to the same substances listed on the permits of those permittees in Freshwater Lens of the subject well. Samples shall be taken by the certified laboratory performing the analyses, or its authorized representative. Annual reports prepared by a certified laboratory of the analyses for regulated substances shall be submitted to the GBPA for the purpose of determining the presence of regulated substances in each well.
- (1) Regulated substances in Groundwater Monitoring Wells. Groundwater monitoring well(s) shall be provided at the expense of the permittee in a manner, number and location approved by the GBPA. Except for existing wells found by the GBPA to be adequate for this provision, the required well or wells shall be installed by a Bahamian licensed water well contractor. Samples shall be taken by the certified laboratory performing the analyses, or its authorized representative. Analytical reports prepared by a certified laboratory of the quantity present in each monitoring well of the regulated substances listed in the activity's operating permit shall be filed at least semi-annually, or more frequently, as determined by the GBPA, based upon site conditions and operations.

Response to an unintentional discharge to 24. Spill Assessment and Remediation. Upon issuance of an order by the GBPA, corrective action shall immediately be initiated by the responsible person. Failure to initiate corrective action shall be a violation of this bye-law. Corrective action shall

surface water or include any or all of the following: groundwater (i) Cessation of the discharge and initial control, containment and recovery of free-flowing, floating or standing pollutants; (ii) Removal and disposal of contaminated soils, sediments, vegetation, containers, recovery and other contaminated materials in accordance with applicable national and local regulations; (iii) Assessment of the horizontal and vertical extent of soil, sediment, surface water and groundwater contamination, as well as rate and direction of migration of the contaminants; and (iv) Remediation of contaminated soils, sediments, surface water and groundwater to preclude further migration of unacceptable levels of residual Regulated Substances into or through the surface water or groundwater environment. The GBPA shall determine necessary, reasonable measures and time frames for corrective action. The corrective action shall be completed to the satisfaction of the GBPA. Where national or local regulations establish procedures or cleanup levels for corrective action for particular discharges, the corrective action shall at a minimum comply with those procedures and cleanup levels. Completion of corrective action as specified by the GBPA shall not relieve the responsible person or persons of liability under any other applicable National or local regulation, rule, ordinance or requirement; nor shall it relieve the responsible person or persons of liability for corrective actions for conditions which were previously unknown to the GBPA, or which resulted from implementation of corrective action as required. A long term monitoring programme to confirm that no residual product lingers and that the contaminant migration has in fact been contained and the boundaries of contamination have been correctly described. Applicability for 25. (1) These regulations apply to any new or existing institutional, commercial, or Air Emission industrial firm or facility emitting air pollutants, gases or contaminants into the ambient air environment of the Port Area, and shall be valid for two years if there is no significant deviation to the discharge. (2) The Authority shall consider applications for air emission (AE) to release contaminants or pollutants into the ambient air of The Port Area.as a component of the Environmental Operating Permit **Application for** 26. An application for AE shall be submitted in a form acceptable to the Authority, Air Emission consisting at a minimum of the following details: (1)The name, mailing address, and location of the facility; The name and mailing address of the owner of the facility and the (2)name and mailing address of the operator of the facility, if different:

- (3) A description of the facility, including all activities or processes that generate contaminants or pollutants harmful to the environment and human health and a description of each such contaminant or pollutant generated with an estimate of the annual quantity of each that is released into the ambient air of The Port Area;
- (4) A description of the location of all points from which contaminants or pollutants are released from the facility into the ambient air of The Port Area;
- (5) Details of the pretreatment process i.e. Best Available Technologies of the pollutants, gases or being pollutants;
- (6) The results of analyses conducted by the demonstrating that the ambient limits established under Section 7 will be met by the permitted release. The Authority may require, as support for these analyses, the results of any or all of the following:
  - (i) Air quality surveys, including, chemical-specific and locationspecific ambient air quality analyses and dispersion modeling studies;
  - (ii) Plume rise dispersion and deposition models;
  - Bio-surveys, including human health studies, ecosystem evaluations, studies of the proliferation of certain organisms, and bioaccumulation studies;
  - (iv) Toxicity reduction evaluations;
  - (v) Monitoring plans; and
  - (vi) Other studies required by the Authority to support a decision on the application.

Air Quality Monitoring Plans 27. The monitoring plan will include the following minimum requirements: The pollutants being monitored, number of monitoring stations, frequency and duration of monitoring or sampling, measuring or sampling techniques and analytical methods, if necessary are dependent upon the pollutant to be monitored and its emission rate.

Notice of Intent 28. (1) Facilities with existing discharges to ambient air on the effective date of these regulations shall submit the Notice of Intent within 90 days of the effective date of these regulations.

(2) Upon petition in the notice of Intent, facilities with existing discharges to ambient air on the effective date of these regulations shall be allowed a period of time to come into compliance with emission limitations and monitoring provisions.

# Air Emission<br/>Prohibitions29. Persons are prohibited from:<br/>(i) emitting, depositing, issuing or causing the emission, deposit, issuance or

discharge into the ambient air inside the mixing zone of any regulated air contaminant in excess of the discharge limitations expressly allowed by the Environmental Operating Permit or otherwise exempted by these regulations; and

- (ii) carrying out any work on any premises that may result in a new source of air contaminant or cause a material change in the quantity or quality of the discharge from an existing source that exceeds the permitted limits without prior written consent.
- 30. Based on the information provided, The Authority shall approve
  - a. the method of discharge which may be used;
  - b. the essential precautions which must be taken, paying particular attention to the nature and concentration of the pollutants, gases or contaminants in the emission, the characteristics of the receiving environment and the dispersion area;
  - c. the maximum quantity of any such pollutant/contaminant permissible in the emission during one or more specified periods of time and the appropriate requirements as to the concentration of any such substance;
  - d. the arrangements for monitoring emission levels into the air; and
  - e. measures for monitoring air quality.

#### PART 5

#### HAZARDOUS MATERIAL & WASTE MANAGEMENT

31. The Authority shall consider an application for hazardous material and waste management licence and an identification number as a component of the Environmental Operating Permit.

32. A request for a hazardous waste management licence shall be submitted in a form acceptable to the Authority, consisting at a minimum of the following details:

- (1) The name, mailing address, and location of the hazardous waste management facility;
- (2) The name and mailing address of the owner of the facility and the name and mailing address of the operator, if different;

Terms of the Authorization for Emitting into the Ambient Air

Hazardous

Waste

Material and

Management and Identification Number

Application for a

Hazardous

Material and Waste Licence

Management

- (3) A description of the facility, including all activities or processes used to store, treat, or dispose of hazardous waste;
- (4) A description of each hazardous waste generated, stored, treated, or disposed of at the facility;
- (5) An estimate of the annual quantity of each hazardous waste generated, stored, treated, or disposed of at the facility; and
- (6) A plan for the environmentally sound management of waste, demonstrating to the maximum extent technically feasible how the waste will be permanently isolated and how the location, construction, monitoring, operating, and closure/post-closure standards of Part 7 will be met.

Applicability33. These regulations apply to any person, institutional, commercial or industrial<br/>firm who use, store, generate, process, manufacture, dispose of 55 gallons, 200 cubic<br/>feet or 500 lbs of hazardous materials (all total) in a month and/or otherwise:

- (3) transfer hazardous materials and/or waste to another person for transport from the site where it is generated,
- (4) accept hazardous materials/waste from a user/generator for transport, treatment, storage, or disposal of such hazardous waste,
- (5) operate a hazardous waste storage, treatment, or disposal facility,
- (6) transport hazardous materials/waste within The Port Area,
- (6) import hazardous materials/waste into The Port Area, or
- (7) export hazardous materials/waste from The Port Area.

34. No person shall be granted a licence for the handling, transport, storage, treatment, or disposal of hazardous materials and waste unless that person has demonstrated by means of a:

- a. monitoring plan acceptable to the Authority, that the person has in place a system for storing hazardous materials, detecting releases of hazardous wastes or hazardous waste constituents from the facility to the environment that could threaten human health or the environment.
- b. surety, insurance, or other form of financial assurance in an amount acceptable to the Authority, that the person can clean up and close the hazardous waste management facility and pay reasonably foreseeable claims for bodily injury or property damage caused by releases from transport or from the facility.
- c. contingency plan acceptable to the Authority, that the person has an organized, planned, and coordinated course of action to be followed

Hazardous Material & Waste Management Licence Requirements

in case of a fire, explosion, or release of hazardous materials, waste or hazardous waste constituents which could threaten human health or the environment.

### PART 6

#### PACKAGING & LABELING OF HAZARDOUS MATERIALS AND WASTE AND MOVEMENT DOCUMENTS

**Requirements** 35. Hazardous materials and waste requires segregation from non-hazardous items, special for handling storage, movement and disposal systems, and documentation that identifies them as such when Hazardous being shipped. Materials and Waste Packaging and 36. No person shall store or transport hazardous materials and waste that is not Labeling adequately packaged and labeled and in conformity with the standards established by Standards the Authority. Specifically, a. packaging of hazardous material must be adequate in strength and quality to withstand normal transportation. b. packaging used must be compatible with the hazardous material and adequate considering the level of risk presented by the material. c. labelling should be prominent, legibly displayed on a background of sharply contrasting color and contain at a minimum the following: i. Hazardous material description and proper transporting/shipping name ii. Hazardous Classification/ Identification Number as established by the United Nations iii. Hazardous Warning Container 37. Before transporting or offering hazardous materials and waste for transportation, Marking the generator must mark each container with the following words and information: HAZARDOUS MATERIAL OR WASTE. Improper disposal is prohibited. If found, notify the nearest police or public safety official or the Authority. Generator's name and address: **Contents of** 38. A user or generator of hazardous material or waste that transports or offers such Movement material or waste for transport, examples of which are identified in Schedule 3, must Document prepare a movement document, which may be in a format specified by the Authority, that contains the following information: (1) The name, address, telephone number, and hazardous material and/or waste licence number of the user/generator; (2) The name, address, telephone number, and hazardous material and/or

waste licence number of the transporter;

|                                                                                       | (3) The name, address, telephone number, and hazardous material and/or<br>waste licence number of the facility to which the hazardous material<br>and/or waste is being transported; and                                                                                                                                                                                                                                                          |  |  |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|                                                                                       | (4) A description of each hazardous material & waste, including a<br>description, the amount, the type of container containing and special<br>handling requirements, if any, for each type of material and/or waste.                                                                                                                                                                                                                              |  |  |
| Copies of<br>Movement<br>Document                                                     | 39. The movement document shall consist of the number of copies necessary to provide the generator, each transporter, and the owner or operator of the facility to which the hazardous waste is being transported with one copy each for their records, another copy to be returned to the generator, and a copy to be delivered to the Authority.                                                                                                |  |  |
| Signature of<br>Generator                                                             | 40. The movement document shall be signed by the generator, who shall retain a copy of the signed document available for inspection for five years.                                                                                                                                                                                                                                                                                               |  |  |
| Signatures of<br>Transporters                                                         | 41. The movement document shall be signed by the initial transporter of the hazardous waste generated and by each subsequent transporter, as acknowledgement of the receipt of the materials. The transporter(s) shall retain a copy of the signed document available for inspection for five years.                                                                                                                                              |  |  |
| Signature of<br>Facility Operator                                                     | The movement document shall be signed by the operator of the facility, who shall<br>n a copy of the signed document available for inspection at the facility for five<br>s to which the hazardous waste is being transported. The operator also shall send<br>copy of the movement document containing the signatures of the generator, each<br>sporter, and the owner or operator of the facility to the generator and one copy to<br>Authority. |  |  |
| Permission for<br>Transportation<br>of Hazardous<br>Material outside<br>the Port Area | 43. Permission for the transport of hazardous material and waste outside of the Port Area will be subject to national laws and regulations, with the necessary approvals being regulated by the Government of the Commonwealth of The Bahamas.                                                                                                                                                                                                    |  |  |

#### PART 7

### STORAGE, TREATMENT, AND DISPOSAL FACILITIES FOR SOLID AND HAZARDOUS WASTES

Location, Construction, Monitoring, Operating, and Closure/Post Closure Care Requirements 44. The Authority shall establish as conditions of licenses for solid or hazardous waste storage, treatment, or disposal facilities those standards that, in the opinion of the Authority, are reasonable and necessary insofar as is technically feasible to permanently isolate the waste and to protect human health and the environment from waste at the facility. Such standards must include:

- (1) Location requirements. The Authority shall prohibit the location of new solid or hazardous waste management facilities in areas of human or environmental sensitivity or vulnerability and set limits on the proximity of such facilities to natural or cultural resources. The Authority may require such facilities currently located in areas of human or environmental sensitivity or in proximity to natural or cultural resources to cease and desist operations and conduct cleanup operations.
- (2) Construction requirements and Design Specifications. The Authority shall specify as license conditions such standards for the construction of new solid or hazardous waste management facilities as in the opinion of the Authority are necessary to isolate the waste and to protect human health and the environment. The Authority may require such facilities currently in operation to conduct such backfit as the Authority deems necessary to protect human health and the environment from wastes at the facility.
- (3) Monitoring requirements. The Authority shall specify as license conditions such standards for ambient air, water, and soil monitoring by the owner or operator of the facility that in the opinion of the Authority are necessary to ensure that releases to the environment from the facility that are capable of posing a threat to human health or the environment are detected.
- (4) Operating requirements. The Authority shall specify as license conditions such standards for the operation of a solid or hazardous waste management facility that in the opinion of the Authority are necessary to ensure that the operation and maintenance of the facility does not pose a threat to human health or the environment.
- (5) Closure and post-closure care requirements. The Authority shall specify as license conditions such standards for closure and post-closure care of the facility that in the opinion of the Authority are necessary to ensure that following closure of the facility any solid or hazardous waste remaining at the site will not pose a threat to human health or the environment.

#### PART 8

#### GENERAL

Offenses and Penalties 45. (1) A person guilty of an offence under these regulations shall be liable to a fine not exceeding five thousand Bahamian dollars (B\$5000.00) or imprisonment for a term not exceeding three months or both, and in the case of a continuing offence to a further fine not exceeding five hundred Bahamian dollars (B\$500) for each day or part thereof during which the office continue after a conviction is first obtained.

(2) Where a person has been found guilty of to have caused pollution/environmental

damage the polluter pays principle will apply, which means that the polluter should bear the expenses of carrying out the pollution prevention, control and remediation measures to ensure that the environment is left in an acceptable state.

### Schedule 1

### AMBIENT WATER QUALITY CRITERIA FOR CHEMICAL POLLUTANTS IN SURFACE WATERS OF THE PORT AREA\*

### A: Numerical Standards

| CAS<br>Number       | Pollutant<br>(footnote)   | Drinking & Fish<br>Consumption<br>(freshwater) | Fish<br>Consumption<br>Only<br>(saltwater) | Units |
|---------------------|---------------------------|------------------------------------------------|--------------------------------------------|-------|
| 7440382             | Arsenic                   | 0.018                                          | 0.14                                       | μg/L  |
| 7440439             | Cadmium                   | e(0.7852[lnH]-<br>3.49)                        | 5.0                                        | µg/L  |
| 7782505             | Chlorine (total residual) | 0.01                                           | 0.01                                       | mg/L  |
| 16065831            | Chromium III              | e(0.819[lnH]+0.6<br>848)                       |                                            | µg/L  |
| 18540299            | Chromium VI               | 11                                             | 50                                         | µg/L  |
| 7440508             | Copper                    | 0.015                                          | 0.03                                       | mg/L  |
| 7439921             | Iron                      | 1.0                                            | 0.3                                        | mg/L  |
| 7439921             | Lead                      | 0.3                                            | 0.0085                                     | mg/L  |
| 7439976             | Mercury                   | 0.002                                          | 0.002                                      | µg/L  |
| 7440020             | Nickel                    | 190                                            | 260                                        | µg/L  |
| 1336363 Phosphorous |                           | 0.1                                            | 0.1                                        | µg/L  |
| 7782492             | Selenium                  | 30                                             | 40                                         | µg/L  |
| 7440666             | Zinc                      | 0.03                                           | 0.086                                      | mg/L  |
| 309002              | Aldrin                    | 0.00013                                        | 0.00014                                    | µg/L  |
| 71432               | Benzene                   | 2.2                                            | 51                                         | µg/L  |
| 57125               | Cyanide                   | 5.0                                            | 5.0                                        | µg/L  |
| 7723140             | PCBs                      | 0.000064                                       | 0.000064                                   | µg/L  |
| 57749               | Chlordane (19)            | 0.00080                                        | 0.00081                                    | µg/L  |
| 50293               | DDT                       | 0.00022                                        | 0.00022                                    | µg/L  |
| 959988              | Endosulfan                | 110                                            | 240                                        | µg/L  |

| 72208   | Endrin                          | 0.076 <sup>(a)</sup> | 0.081 <sup>(a)</sup> | µg/L |
|---------|---------------------------------|----------------------|----------------------|------|
| 100414  | Ethylbenzene                    | 530                  | 2,100                | µg/L |
| 87865   | Pentachlorophe<br>nol           | 0.27                 | 3.0                  | µg/L |
| 108952  | Phenolic<br>Compound:<br>Phenol | 0.3                  | 0.3                  | mg/L |
| 8001352 | Tetrachloro-<br>ethylene        | 0.69                 | 3.3                  | µg/L |
| 8001352 | Toxaphene                       | 0.00073              | 0.00075              | µg/L |
| 79016   | Trichloro-<br>ethylene          | 2.5                  | 3.0                  | µg/L |
| 75014   | Vinyl Chloride                  | 0.025                | 2.4                  | µg/L |
|         | Dissolved Oils<br>and Greases   | 5.0                  | 5.0                  | mg/L |
|         | Detergents                      | 0.5                  | 0.5                  | mg/L |

**Notes:** (1) "lnH" means the natural logarithm of total hardness expressed as milligrams/L of CaCO<sub>3</sub>. For metals criteria involving equations with hardness, the hardness shall be set at 25 mg/L if actual hardness is < 25 mg/L and set at 400 mg/L if actual hardness is > 400 mg/L.

\*Surface water quality levels above any of the following surface water quality criteria constitute pollution unless background levels exceed those criteria.

### Sources:

Water quality criteria and standards developed by the United States Environmental Protection Agency (USEPA), and Florida in the United States of America.

(a) USEPA (U.S. Environmental Protection Agency). April,1999. *National Recommended Water Quality Criteria -- Correction*. Office of Water, Washington, DC. EPA 822-Z-99-001.

(b) Florida, US State: Title 62, Chapter 62-302, Florida. December 26, 1996. Section 62-302.300 Findings, Intent and Antidegradation Policy for Surface Water Quality (Integrated).

#### **B.** Additional Narrative Standards

#### **Standards for Bacteria in Surface Waters:**

Freshwater:

*Escherichia coli* should not exceed 126 cells/100 ml enterococci should not exceed 33 cells/100 ml

### Saltwater:

enterococci should not exceed 35 cells/100 ml

### **Color Standard:**

The waters of The Port Area shall be free from substances producing objectionable color for aesthetic purposes. The source should not exceed 75 color units on the platinum-cobalt scale for domestic water supplies. The depth of the compensation point for photosynthetic activity should not be lowered due to coloration by more than 10 percent from the normal seasonal patterns for aquatic life.

### **Chlorides Standards:**

In predominantly marine waters, the chloride content shall not be increased more than ten persent (10%) above background chloride content. Normal daily and seasonal fluctuations in chloride levels, established using available data, shall be maintained.

### pH Standards:

pH- shall not vary more than one unit above or below natural background provided that the pH is not lowered to less than 6 units or raised above 8.5 units. If natural background is less than 6 units, the pH shall not vary below natural background or vary more than one unit above natural background. If natural background is higher than 8.5 units, the pH shall not vary above natural background or vary more than one unit below background.

### Solids (suspended, settleable) and Turbidity Standard:

For the protection of freshwater fish and other freshwater aquatic life, settleable and suspended solids should not reduce the depth of the compensation point for photosynthetic activity by more than 10 percent from the seasonally established norm for aquatic life.

### **Turbidity Standards:**

Turbidity shall not exceed 29 Nephelometric Turbidity Units (NTU's) above background

### Specific Conductance Standards:

Specific Conductance shall not be increased more than 100% above background levels or to a maximum level of 500 micromhos per centimeter in surface water in which the specific conductance of the water at the surface is less than 500 micromhos per centimeter; and shall not be increased more than 50% above background level or to a maximum level of 500 micromhos per centimeter but less than 5,000 micromhos per centimeter.

### **Dissolved Oxygen Standards:**

In freshwater the concentration shall not be less than 5 mg/L. In saltwater, the concentration shall not average less than 5 mg/L in a 24 hour period and shall never be less than 4.0. Normal daily and seasonal fluctuations above these levels shall be maintained in both fresh and saltwater environments.

### Nutrients:

The discharge of nutrients shall continue to be limited as needed to prevent violations of other standards contained herein. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota. Man-induced nutrient enrichment (total nitrogen or total phosphorus) shall be considered degradation in relation to the provisions of this schedule.

#### Nuisance species:

Substances in concentrations which result in the dominance of nuisance species none shall be present.

| Effluent                | Parameter                                      | Maximum Limit | Unit               |
|-------------------------|------------------------------------------------|---------------|--------------------|
| Characteristics         |                                                |               |                    |
| Organic Load            | Five Day BOD                                   | 30            | mg/l               |
|                         | COD                                            | 100           | mg/l               |
| Aesthetic               | TSS                                            | 30            | mg/l               |
|                         | Oil & Grease                                   | 5             | mg/l               |
| Aquatic Life Protection | pH                                             | 6-9           | Standard units     |
|                         | Temperature                                    | 95            | Degrees Fahrenheit |
|                         | Toxicity                                       | Monitoring    |                    |
| Nutrients               | Total Phosphorus                               | 1             | mg/l               |
|                         | Total Nitrogen (Kjeldahl<br>+ Nitrate-Nitrite) | 20            | mg/l               |

#### **Inland Waters Effluent Limitation Discharge**

### **Ocean Waters Effluent Limitation Discharge:**

Limitation standards will be simultaneous to those standards prescribed under National Regulations.

### Schedule 2

### AMBIENT AIR QUALITY CRITERIA STANDARDS

|     | llutant            |                                                                 |                  | <b>T 1 1</b>                                                                                                                                                                 |
|-----|--------------------|-----------------------------------------------------------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) | sulphur dioxide    |                                                                 | Averaging period | Limit value                                                                                                                                                                  |
|     |                    | 1. Hourly limit value for<br>the protection of human<br>health  | 1 hour           | 0.25 ppm (690 ug/m <sup>3</sup> )                                                                                                                                            |
|     |                    | 2. Daily limit value for<br>the protection of human<br>health   | 24 hours         | 0.10 ppm (275 µg/m <sup>3)</sup> ,<br>not to be exceeded more<br>than once per calendar<br>year                                                                              |
|     |                    | 3. Limit value for the protection of ecosystems                 | Calendar year    | 0.02 ppm (55 μg/m <sup>3</sup> )                                                                                                                                             |
| (2) | nitrogen dioxide   |                                                                 | Averaging period | Limit value                                                                                                                                                                  |
|     |                    | 1. Annual limit value for<br>the protection of human<br>health  | Calendar year    | $60 \ \mu g/m^3 \ NO_2 \ as \ an annual arithmetic mean$                                                                                                                     |
| (3) | particulate matter |                                                                 |                  |                                                                                                                                                                              |
| (3) | $(PM_{10})$        |                                                                 | Averaging period | Limit value                                                                                                                                                                  |
|     |                    | STAGE 1                                                         |                  |                                                                                                                                                                              |
|     |                    | 1. 24-hour limit value<br>for the protection of<br>human health | 24 hours         | $\begin{array}{c} 150 \ \mu\text{g/m}^3 \ PM_{10} \ \text{not to} \\ \text{be exceeded more than} \\ \text{once per year on} \\ \text{average over three years} \end{array}$ |
|     |                    | 2. Annual limit value for<br>the protection of human<br>health  | Calendar year    | 50 µg/m <sup>3</sup> PM <sub>10</sub>                                                                                                                                        |
|     |                    |                                                                 | Γ                |                                                                                                                                                                              |
| (4) | particulate matter |                                                                 |                  |                                                                                                                                                                              |

| ) | particulate matter (PM <sub>2.5</sub> ) |                                                                 | Averaging period | Limit value                                                                                                                                                                                                                                  |
|---|-----------------------------------------|-----------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                         | 1. 24-hour limit value<br>for the protection of<br>human health | 24 hours         | $35 \ \mu g/m^3 PM_{2.5}$ to attain<br>this standard, the 3-year<br>average of the 98 <sup>th</sup><br>percentile of 24 hour<br>concentrations at each<br>population-oriented<br>monitor within an area<br>must not exceed 35<br>$\mu g/m^3$ |

|     |                   | 2. Annual limit value for<br>the protection of human<br>health                   | Calendar year                 | 15.0 $\mu$ g/m <sup>3</sup> PM <sub>2.5</sub> to<br>attain this standard, the<br>3-year average of the<br>weighted annual mean<br>PM <sub>2.5</sub> concentrations<br>from single or multiple<br>community-oriented<br>monitors must not<br>exceed 15.0 $\mu$ g/m <sup>3</sup> |
|-----|-------------------|----------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                   |                                                                                  |                               |                                                                                                                                                                                                                                                                                |
| (5) | Lead              |                                                                                  | Averaging period              | Limit value                                                                                                                                                                                                                                                                    |
|     |                   | Quarterly value for the protection of human health                               | Quarter of a Calendar<br>Year | 1.5 μg/m <sup>3</sup>                                                                                                                                                                                                                                                          |
| (6) | Ozone             |                                                                                  | Averaging period              | Limit value                                                                                                                                                                                                                                                                    |
|     |                   | Hourly limit value for<br>the protection of human<br>health                      | 1 hour                        | 165 μg/m <sup>3</sup>                                                                                                                                                                                                                                                          |
| (7) | Hydrogen Sulphide |                                                                                  | Averaging period              | Limit value                                                                                                                                                                                                                                                                    |
|     |                   | 1. Hourly limit value for<br>the protection of human<br>health                   | 1 hour                        | 8 μg/m <sup>3</sup>                                                                                                                                                                                                                                                            |
|     |                   | 2. Daily limit value for<br>the protection of human<br>health                    | 24 hours                      | 2 μg/m <sup>3</sup>                                                                                                                                                                                                                                                            |
|     |                   |                                                                                  |                               |                                                                                                                                                                                                                                                                                |
| (8) | Carbon Monoxide   |                                                                                  | Averaging period              | Limit value                                                                                                                                                                                                                                                                    |
|     |                   | 1. Hourly limit value for<br>the protection of human<br>health                   | 1 hour                        | 35 ppm 40 mg/m <sup>3</sup> not<br>to be exceed more than<br>once per year                                                                                                                                                                                                     |
|     |                   | 2. Eight-hour limit value<br>for the protection of<br>human health               | 8 hours                       | 9 ppm (10 mg/m <sup>3</sup> ) not to<br>be exceed more than<br>once a year                                                                                                                                                                                                     |
| (9) | Dustfall          |                                                                                  | Averaging period              | Limit value                                                                                                                                                                                                                                                                    |
|     |                   | 1. 30day limit value for<br>the protection of human<br>health in residential and | 30 days                       | 53mg/100cm2/30days                                                                                                                                                                                                                                                             |

recreation areas.

| the protection of human<br>health in commercial<br>and industrial areas. | 158 mg/100cm2/30days |
|--------------------------------------------------------------------------|----------------------|
|--------------------------------------------------------------------------|----------------------|

| (10) Ammonia |                                                                | Averaging period | Limit value |
|--------------|----------------------------------------------------------------|------------------|-------------|
|              | 1. Hourly limit value for<br>the protection of human<br>health | 1 hour           | 2.0 ppm     |

Sources:

a. The United States Environmental Protection Agency – National Ambient Air Quality Standards

- b. Air Toxics Management Program in Alberta. 1998 Air Emissions Branch and Air Issues and Monitoring Branch – Appendix A Alberta Ambient Air Quality Guidelines
- c. Ontario Statutes and Regulations (R.R.O 1990, Regulation 337) Environmental Protection Act Ambient Air Quality Criteria

#### **Schedule 3**

### CATEGORIES OF HAZARDOUS WASTES

#### Waste Streams

- -- Clinical wastes from medical care in hospitals, medical centers and clinics
- -- Wastes from the production and preparation of pharmaceutical products
- -- Waste pharmaceuticals, drugs and medicines
- -- Wastes from the production, formulation and use of biocides and phytopharmaceuticals
- -- Wastes from the manufacture, formulation and use of wood preserving chemicals
- -- Wastes from the production, formulation and use of organic solvents
- -- Wastes from heat treatment and tempering operations containing cyanides
- -- Waste mineral oils unfit for their originally intended use
- -- Waste oils/water, hydrocarbons/water mixtures, emulsions
- -- Waste substances and articles containing or contaminated with polychlorinated biphenyls (PCBs) and/or polychlorinated terphenyls (PCTs) and/or polybrominated biphenyls (PBBs)
- -- Waste tarry residues arising from refining, distillation and any pyrolytic treatment
- -- Wastes from production, formulation and use of inks, dyes, pigments, paints, lacquers, varnish
- -- Wastes from production, formulation and use of resins, latex, plasticizers, glues/adhesives
- -- Waste chemical substances arising from research and development or teaching activities which are not identified and/or are new and whose effects on man and/or the environment are not known
- -- Wastes of an explosive nature not subject to other legislation
- -- Wastes from production, formulation and use of photographic chemicals and processing materials
- -- Wastes resulting from surface treatment of metals and plastics
- -- Residues arising from industrial waste disposal operations

#### Wastes having as constituents:

- -- Metal carbonyls
- -- Beryllium; beryllium compounds
- -- Hexavalent chromium compounds
- -- Copper compounds
- -- Zinc compounds
- -- Arsenic; arsenic compounds
- -- Selenium; selenium compounds
- -- Cadmium; cadmium compounds
- -- Antimony; antimony compounds
- -- Tellurium; tellurium compounds
- -- Mercury; mercury compounds
- -- Thallium; thallium compounds
- -- Lead; lead compounds
- -- Inorganic fluorine compounds excluding calcium fluoride
- -- Inorganic cyanides
- -- Acidic solutions or acids in solid form
- -- Basic solutions or bases in solid form
- -- Asbestos (dust and fibres)
- -- Organic phosphorus compounds
- -- Organic cyanides
- -- Phenols; phenol compounds including chlorophenols
- -- Ethers
- -- Halogenated organic solvents
- -- Organic solvents excluding halogenated solvents
- -- Any congenor of polychlorinated dibenzo-furan

- -- Any congenor of polychlorinated dibenzo-p-dioxin
- -- Organohalogen compounds other than substances referred to in this Schedule

Source: Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

#### Schedule 4 SUBSTANCES IN ACUTELY HAZARDOUS WASTE

Hazardous waste that is classified as acutely hazardous contains one or more of the following:

| Chemical Abstracts No. | Substance                               |
|------------------------|-----------------------------------------|
| 107-20-0               | Acetaldehyde, chloro-                   |
| 591-08-2               | Acetamide, N-(aminothioxomethyl)-       |
| 640-19-7               | Acetamide, 2-fluoro                     |
| 62-74-8                | Acetic acid, fluoro, sodium salt        |
| 591-08-2               | 1-Acetyl-2-thiourea                     |
| 107-02-8               | Acrolein                                |
| 116-06-3               | Aldicarb                                |
| 1646-88-4              | Aldicarb sulfone                        |
| 309-00-2               | Aldrin                                  |
| 107-18-6               | Allyl alcohol                           |
| 20859-73-8             | Aluminum phosphide (R,T)                |
| 2763-96-4              | 5-(Aminomethyl)-3-isoxazolol            |
| 504-24-5               | 4-Aminopyridine                         |
| 131-74-8               | Ammonium picrate (R)                    |
| 7803-55-6              | Ammonium vanadate                       |
| 506-61-6               | Argentate(1-), bis(cyano-C)-, potassium |
| 7778-39-4              | Arsenic Acid H(3)AsO(4)                 |
| 1327-53-3              | Arsenic oxide As(2)O(3)                 |
| 1303-28-2              | Arsenic oxide As(2)O(5)                 |
| 1303-28-2              | Arsenic pentoxide                       |
| 1327-53-3              | Arsenic trioxide                        |
| 692-42-2               | Arsine, diethyl-                        |
| 696-28-6               | Arsonous dichloride, phenyl-            |
| 151-56-4               | Aziridine                               |
| 75-55-8                | Aziridine, 2-methyl-                    |
| 542-62-1               | Barium cyanide                          |

| 106-47-8   | Benzenamine, 4-chloro-                                                                                                                                   |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 100-01-6   | Benzenamine, 4-nitro-                                                                                                                                    |
| 100-44-7   | Benzene, (chloromethyl)-                                                                                                                                 |
| 51-43-4    | 1,2-Benzenediol, 4-[1-hydroxy-2- <(methylamino)ethyl]-, (R)-                                                                                             |
| 122-09-8   | Benzeneethanamine, alpha, alpha-dimethyl-                                                                                                                |
| 108-98-5   | Benzenethiol                                                                                                                                             |
| 1563-66-2  | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-,methylcarbamate                                                                                                |
| 57-64-7    | Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-<1,2,3,3a,8,8a-<br>hexahydro-1,3a,8-trimethyl-pyrrolo-< [2,3-b]indol-5-yl<br>methylcarbamate ester (1:1) |
| {1}81-81-2 | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)- and salts when present at concentrations< greater than 0.3%                                   |
| 100-44-7   | Benzyl chloride                                                                                                                                          |
| 7440-41-7  | Beryllium Powder                                                                                                                                         |
| 598-31-2   | Bromoacetone                                                                                                                                             |
| 357-57-3   | Brucine                                                                                                                                                  |
| 39196-18-4 | 2-Butanone, 3,3-dimethyl-1-(methylthio)-,< O-[methylamino) carbonyl] oxime                                                                               |
| 592-01-8   | Calcium cyanide                                                                                                                                          |
| 592-01-8   | Calcium cyanide Ca(CN)(2)                                                                                                                                |
| 55285-14-8 | Carbamic acid, [(dibutylamino)- thio]methyl-,< 2,3-dihydro-2,2-<br>dimethyl-7-benzofuranyl ester                                                         |
| 644-64-4   | Carbamic acid, dimethyl-, 1-[(dimethyl-amino) carbonyl]- 5-methyl-<br>1H-pyrazol-3-yl ester                                                              |
| 119-38-0   | Carbamic acid, dimethyl-, 3-methyl-1-<(1-methylethyl)-1H-pyrazol-5-yl ester                                                                              |
| 1129-41-5  | Carbamic acid, methyl-, 3-methylphenyl ester                                                                                                             |
| 1563-66-2  | Carbofuran                                                                                                                                               |
| 75-15-0    | Carbon disulfide                                                                                                                                         |
| 75-44-5    | Carbonic dichloride                                                                                                                                      |
| 55285-14-8 | Carbosulfan                                                                                                                                              |
| 107-20-0   | Chloroacetaldehyde                                                                                                                                       |
| 106-47-8   | p-Chloroaniline                                                                                                                                          |

| 5344-82-1   | 1-(o-Chlorophenyl)thiourea                                                                                                                                                             |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 542-76-7    | 3-Chloropropionitrile                                                                                                                                                                  |
| 544-92-3    | Copper cyanide                                                                                                                                                                         |
| 544-92-3    | Copper cyanide Cu(CN)                                                                                                                                                                  |
| 64-00-6     | m-Cumenyl methylcarbamate Cyanides (soluble cyanide salts), not< otherwise specified                                                                                                   |
| 460-19-5    | Cyanogen                                                                                                                                                                               |
| 506-77-4    | Cyanogen chloride                                                                                                                                                                      |
| 506-77-4    | Cyanogen chloride (CN)Cl                                                                                                                                                               |
| 131-89-5    | 2-Cyclohexyl-4,6-dinitrophenol                                                                                                                                                         |
| 542-88-1    | Dichloromethyl ether                                                                                                                                                                   |
| 696-28-6    | Dichlorophenylarsine                                                                                                                                                                   |
| 60-57-1     | Dieldrin                                                                                                                                                                               |
| 692-42-2    | Diethylarsine                                                                                                                                                                          |
| 311-45-5    | Diethyl-p-nitrophenyl phosphate                                                                                                                                                        |
| 297-97-2    | O,O-Diethyl O-pyrazinyl phosphorothioate                                                                                                                                               |
| 55-91-4     | Diisopropylfluorophosphate (DFP)                                                                                                                                                       |
| 309-00-2    | 1,4,5,8-Dimethanonaphthalene,<1,2,3,4,10,10-hexachloro-<br>1,4,4a,5,8,8a-hexahydro-,<(1alpha,4alpha, 4abeta, 5alpha, 8alpha,<br>8abeta)-                                               |
| 465-73-6    | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-< hexachloro-<br>1,4,4a,5,8,8a-hexahydro-,(1alpha,< 4alpha,4abeta,5beta,8beta,8abeta)-                                                     |
| 60-57-1     | 2,7:3,6-Dimethanonaphth[2,3-b]oxirane, 3,4,5,6,9,9-hexachloro-<br>1a,2,2a,3,6,6a,7,7a-< octahydro-,(1aalpha,2beta,2aalpha,<<br>3beta,6beta,6aalpha,7beta,7aalpha)-                     |
| {1}72-20-8  | 2,7,3,6-Dimethanonaphth[2,3-b] oxirine,< 3,4,5,6,9,9-hexachloro-<br>1a,2,2a,3,6,6a,< 7,7a-octahydro-, (1aalpha,<br><2beta,2abeta,3alpha,6alpha,6abeta, <7beta,7aalpha)-, & metabolites |
| 60-51-5     | Dimethoate                                                                                                                                                                             |
| 122-09-8    | alpha, alpha-Dimethylphenethylamine                                                                                                                                                    |
| 644-64-4    | Dimetilan                                                                                                                                                                              |
| {1}534-52-1 | 4,6-Dinitro-o-cresol, and salts                                                                                                                                                        |
| 51-28-5     | 2,4-Dinitrophenol                                                                                                                                                                      |
| 88-85-7     | Dinoseb                                                                                                                                                                                |
|             |                                                                                                                                                                                        |

| 152-16-9   | Diphosphoramide, octamethyl-                                                                  |
|------------|-----------------------------------------------------------------------------------------------|
| 107-49-3   | Diphosphoric acid, tetraethyl ester                                                           |
| 298-04-4   | Disulfoton                                                                                    |
| 541-53-7   | Dithiobiuret                                                                                  |
| 26419-73-8 | 1,3-Dithiolane-2-carboxaldehyde,<2,4-dimethyl-, O- [(methylamino)-carbonyl]oxime              |
| 115-29-7   | Endosulfan                                                                                    |
| 145-73-3   | Endothall                                                                                     |
| 72-20-8    | Endrin                                                                                        |
| 72-20-8    | Endrin, & metabolites                                                                         |
| 51-43-4    | Epinephrine                                                                                   |
| 460-19-5   | Ethanedinitrile                                                                               |
| 23135-22-0 | Ethanimidothioc acid, 2-(dimethylamino)-N-<[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester |
| 16752-77-5 | Ethanimidothioic acid,N[[(methylamino)carbonyl]oxy]-, methyl ester                            |
| 107-12-0   | Ethyl cyanide                                                                                 |
| 151-56-4   | Ethyleneimine                                                                                 |
| 52-85-7    | Famphur                                                                                       |
| 7782-41-4  | Fluorine                                                                                      |
| 640-19-7   | Fluoroacetamide                                                                               |
| 62-74-8    | Fluoroacetic acid, sodium salt                                                                |
| 23422-53-9 | Formetanate hydrochloride.                                                                    |
| 17702-57-7 | Formparanate.                                                                                 |
| 628-86-4   | Fluminic acid, mercury(2+) salt (R,T)                                                         |
| 76-44-8    | Heptachlor                                                                                    |
| 757-58-4   | Hexaethyl tetraphosphate                                                                      |
| 79-19-6    | Hydrazinecarbothioamide                                                                       |
| 80-34-4    | Hydrazine, methyl-                                                                            |
| 74-90-8    | Hydrocyanic acid                                                                              |
| 74-90-8    | Hydrogen cyanide                                                                              |
| 7803-51-2  | Hydrogen phosphide                                                                            |
| 465-73-6   | Isodrin                                                                                       |

| 119-38-0   | Isolan                                                                                            |
|------------|---------------------------------------------------------------------------------------------------|
| 64-00-6    | 3-Isopropylphenyl N-methylcarbamate                                                               |
| 2763-96-4  | 3(2H)-Isoxazolone, 5-(aminomethyl)-                                                               |
| 15339-36-3 | Manganese, bis(dimethylcarbamodithioato-S,S')-,                                                   |
| 15339-36-3 | Manganese dimethyldithiocarbamate                                                                 |
| 62-38-4    | Mercury, (acetato-O)phenyl-                                                                       |
| 628-86-4   | Mercury fulminate (R,T)                                                                           |
| 62-75-9    | Methanamine, N-methyl-N-nitroso-                                                                  |
| 624-83-9   | Methane, isocyanato-                                                                              |
| 542-88-1   | Methane, oxybis[chloro-                                                                           |
| 509-14-8   | Methane, tetranitro- (R)                                                                          |
| 75-70-7    | Methanethiol, trichloro-                                                                          |
| 23422-53-9 | Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)-<br>carbonyl]oxy]phenyl]-, monohydrochloride  |
| 17702-57-7 | Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-<<br>[[(methylamino)carbonyl]oxy]phenyl]-            |
| 115-29-7   | 6,9-Methano-2,4,3-benzodioxathiepin,<6,7,8,9,10,10-hexachloro-< 1,5,5a,6,9,9a-hexahydro-, 3-oxide |
| 76-44-8    | 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-<br>tetrahydro                         |
| 2032-65-7  | Methiocarb                                                                                        |
| 16752-77-5 | Methomyl                                                                                          |
| 60-34-4    | Methyl hydrazine                                                                                  |
| 624-83-9   | Methyl isocyanate                                                                                 |
| 75-86-5    | 2-Methyllactonitrile                                                                              |
| 298-00-0   | Methyl parathion                                                                                  |
| 1129-41-5  | Metolcarb                                                                                         |
| 315-18-4   | Mexacarbate                                                                                       |
| 86-88-4    | alpha-Naphthylthiourea                                                                            |
| 13463-39-3 | Nickel carbonyl                                                                                   |
| 13463-39-3 | Nickel carbonyl Ni(CO)(4), (T-4)-                                                                 |
| 557-19-7   | Nickel cyanide                                                                                    |
| 557-19-7   | Nickel cyanide Ni(CN)(2)                                                                          |

| {1}54-11-5  | Nicotine, & salts                                                  |
|-------------|--------------------------------------------------------------------|
| 10102-43-9  | Nitric oxide                                                       |
| 100-01-6    | p-Nitroaniline                                                     |
| 10102-44-0  | Nitrogen dioxide                                                   |
| 10102-43-9  | Nitrogen oxide NO                                                  |
| 10102-44-0  | Nitrogen oxide NO(2)                                               |
| 55-63-0     | Nitroglycerine (R)                                                 |
| 62-75-9     | N-Nitrosomethylamine                                               |
| 4549-40-0   | N-Nitrosomethylvinylamine                                          |
| 152-16-9    | Octamethylpyrophosphoramide                                        |
| 20816-12-0  | Osmium oxide OsO(4), (T-4)-                                        |
| 20816-12-0  | Osmium tetroxide                                                   |
| 145-73-3    | 7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid                   |
| 23135-22-0  | Oxamyl                                                             |
| 56-38-2     | Parathion                                                          |
| 131-89-5    | Phenol, 2-cyclohexyl-4,6-dinitro-                                  |
| 51-28-5     | Phenol, 2,4-dinitro-                                               |
| {1}534-52-1 | Phenol, 2-methyl-4,6-dinitro- & salts                              |
| 88-85-7     | Phenol, 2-(1-methylpropyl)-4,6-dinitro-                            |
| 131-74-8    | Phenol, 2,4,6-trinitro-, ammonium salt (R)                         |
| 315-18-4    | Phenol, 4-(dimethylamino)-3,5-dimethyl-,< methylcarbamate (ester). |
| 2032-65-7   | Phenol, (3,5-dimethyl-4-(methylthio)-,methylcarbamate              |
| 64-00-6     | Phenol, 3-(1-methylethyl)-, methyl carbamate.                      |
| 2631-37-0   | Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate              |
| 62-38-4     | Phenylmercury acetate                                              |
| 103-85-5    | Phenylthiourea                                                     |
| 298-02-2    | Phorate                                                            |
| 75-44-5     | Phosgene                                                           |
| 7803-51-2   | Phosphine                                                          |
| 311-45-5    | Phosphoric acid, diethyl 4-nitrophenyl ester                       |
| 298-04-4    | Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl]ester    |
| 298-04-2    | Phosphorodithioic acid, O,O-diethyl< S-[(ethylthio)methyl] ester   |

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| 60-51-5   | Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-<br>oxoethyl] ester          |
|-----------|----------------------------------------------------------------------------------------|
| 55-91-4   | Phosphorofluoridic acid, bis< (1-methylethyl) ester                                    |
| 56-38-2   | Phosphorothioic acid, O,O-diethyl O-(4<br>-nitrophenyl) ester                          |
| 297-92-2  | Phosphorodithioic acid, O,O-diethyl O-<br>pyrazinyl ester                              |
| 52-85-7   | Phosphorothioic acid, O-<br>[4-[(dimethylamino)sulfonyl])phenyl]<br>O,O-dimethyl ester |
| 298-00-0  | Phosphorothioic acid, O,O-dimethyl<br>O-(4-nitrophenyl)ester                           |
| 57-47-6   | Physostigmine                                                                          |
| 57-64-7   | Physostigmine salicylate                                                               |
| 78-00-2   | Plumbane, tetraethyl-                                                                  |
| 151-50-8  | Potassium cyanide                                                                      |
| 151-50-8  | Potassium cyanide K(CN)                                                                |
| 506-61-6  | Potassium silver cyanide                                                               |
| 2631-37-0 | Promecarb                                                                              |
| 116-06-3  | Propanal, 2-methyl-2-(methylthio)-,O-<br>[(methylamino)carbonyl]oxime                  |
| 1646-88-4 | Propanal, 2-methyl-2-(methyl-sulfonyl)-,<br>O-[(methylamino) carbonyl] oxime           |
| 107-12-0  | Propanenitrile                                                                         |
| 542-76-7  | Propanenitrile,3-chloro-                                                               |
| 75-86-5   | Propanenitrile, 2-hydroxy-2-methyl-                                                    |
| 55-63-0   | 1,2,3-Propanetriol, trinitrate (R)                                                     |
| 598-31-2  | 2-Propanone, 1-bromo-                                                                  |
| 107-19-7  | Propargyl alcohol                                                                      |
| 107-02-8  | 2-Propenal                                                                             |
| 107-18-6  | 2-Propen-1-ol                                                                          |
| 75-55-8   | 1,2-Propylenimine                                                                      |
| 107-19-7  | 2-Propyn-1-ol                                                                          |
| 504-24-5  | 4-Pyridinamine                                                                         |

| {1}54-11-5 | Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts            |
|------------|------------------------------------------------------------------|
| 57-47-6    | Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-                         |
|            | hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)- |
| 12039-52-0 | Selenious acid, dithallium(1+) salt                              |
| 630-10-4   | Selenourea                                                       |
| 506-64-9   | Silver cyanide                                                   |
| 506-64-9   | Silver cyanide Ag(CN)                                            |
| 26628-22-8 | Sodium azide                                                     |
| 143-33-9   | Sodium cyanide                                                   |
| 143-33-9   | Sodium cyanide Na(CN)                                            |
| {1}57-24-9 | Strychnidin-10-one, & salts                                      |
| 357-57-3   | Strychnidin-10-one, 2,3-dimethoxy-                               |
| {1}57-24-9 | Strychnine, & salts                                              |
| 7446-18-6  | Sulfuric acid, dithallium(1+) salt                               |
| 3689-24-5  | Tetraethyldithiopyrophosphate                                    |
| 78-00-2    | Tetraethyl lead                                                  |
| 107-49-3   | Tetraethyl pyrophosphate                                         |
| 509-14-8   | Tetranitromethane (R)                                            |
| 757-58-4   | Tetraphosphoric acid, hexaethyl ester                            |
| 1314-32-5  | Thallic oxide                                                    |
| 1314-32-5  | Thallium oxide Tl(2)O(3)                                         |
| 12039-52-0 | Thallium(I) selenite                                             |
| 7446-18-6  | Thallium(I) sulfate                                              |
| 3689-24-5  | Thiodiphosphoric acid, tetraethyl ester                          |
| 39196-18-4 | Thiofanox                                                        |
| 541-53-7   | Thiomidodicarbonic diamide [(H(2)N)C(S)](2)NH                    |
| 108-98-5   | Thiophenol                                                       |
| 79-19-6    | Thiosemicarbazide                                                |
| 5344-82-1  | Thiourea, (2-chlorophenyl)-                                      |
| 86-88-4    | Thiourea, 1-naphthalenyl-                                        |
| 103-85-5   | Thiourea, phenyl-                                                |
| 26419-73-8 | Tirpate                                                          |
|            |                                                                  |

| 8001-35-2  | Toxaphene                                                                        |
|------------|----------------------------------------------------------------------------------|
| 75-70-7    | Trichloromethanethiol                                                            |
| 7803-55-6  | Vanadic acid, ammonium salt                                                      |
| 1314-62-1  | Vanadium oxide V(2)O(5)                                                          |
| 1314-62-1  | Vanadium pentoxide                                                               |
| 4549-40-0  | Vinylamine, N-methyl-N-nitroso-                                                  |
| {1}81-81-2 | Warfarin, & salts, when present at concentrations greater than 0.3%              |
| 137-30-4   | Zinc, bis(dimethylcarbamodithioato-S,S')-,                                       |
| 557-21-1   | Zinc cyanide                                                                     |
| 557-21-1   | Zinc cyanide Zn(CN)(2)                                                           |
| 1314-84-7  | Zinc phosphide Zn(3)P(2), when present at< concentrations greater than 10% (R,T) |
| 137-30-4   | Ziram                                                                            |

\_Freeport (Nuisances) Bye-Laws.

### FREEPORT BYE-LAWS FREEPORT (NUISANCES) BYE-LAWS

| Title<br>Interpretation | <ol> <li>These Bye-laws may be cited as the Freeport (Nuisances) Bye-laws</li> <li>In these Bye-laws, unless the context otherwise requires-</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -                       | "the Act" means the Freeport Bye-laws Act;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                         | "the Authority" means the Port Authority                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                         | "nuisance" means anything or any condition of things which is or may<br>become injurious or dangerous or creates an obstruction or anything<br>or any condition of things that, has an unpleasant effect on the senses<br>or adversely affects the amenities of the surrounding property.                                                                                                                                                                                                                                                                       |
| Nuisances<br>Prohibited | 3. (1) No person shall cause a nuisance or shall cause to exist on any land or premises owned or occupied by that person or of which the said person is in charge or control, any nuisance or other condition that is liable to be injurious or dangerous to health or the environment.                                                                                                                                                                                                                                                                         |
| Noise Nuisance          | 4. (1) Where any noise which is so loud, so continuous, so repeated, of such duration or pitch or occurring at such times as to give reasonable cause for annoyance to a person in any premises in the neighbourhood or to a person lawfully using any public place, the Authority in response to complaints and/or observations may take the necessary measures to have the noise reduced to a specified level or to take specified measures for the prevention or limitation of the noise and the person(s) or entity concerned shall comply with such order. |
|                         | (2) It shall be a good defence, in the case of proceedings under <i>subsection</i> $(1)$ or in a prosecution for a contravention of this section, in the case of noise caused in the course of a trade or business, for the accused to prove that—                                                                                                                                                                                                                                                                                                              |
|                         | <ul> <li>(a) all reasonable care was taken to prevent or limit the noise to which the complaint relates by providing, maintaining, using, operating and supervising facilities, or by employing practices or methods of operation, that, having regard to all the circumstances, were suitable for the purposes of such prevention or limitation, or</li> <li>(b) the noise is in accordance with— <ul> <li>(i) the terms of a licence under this regulation.</li> </ul> </li> </ul>                                                                            |
| Service of notice       | 5. The Authority shall serve a notice on the person alleged to have made, have caused or have been responsible for the noise in the prescribed form of the intention to make such a complaint, within such time as may be specified in the notice.                                                                                                                                                                                                                                                                                                              |
|                         | This section shall not apply to noise caused by—                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                         | <ul><li>(a) aircraft, or</li><li>(b) such statutory undertaker or local authority, as may be prescribed, in the exercise of powers conferred on it by or under any enactment in such</li></ul>                                                                                                                                                                                                                                                                                                                                                                  |

circumstances as may be prescribed.

**Odour Nuisance** 6. (1) Offensive odours that are expected or results from an industrial operation that is carried out in accordance with generally accepted practices for such an operation and in respect of Best Management Practices for that industry, should be registered with the Authority and an estimate of the submitted expected maximum thresholds. No person or facility shall emit or discharge into the atmosphere any (2)pollutant in excess of the quantities permitted under the Environmental Operating Permit issued under the Pollution Prevention and Waste Management Bye-laws Notice re Odour 7. (1) Where the Authority has been made aware of an odour nuisance and/or is of Nuisance the opinion that a substance or thing is causing or has caused an offensive odour or is injurious or dangerous to health, the Authority may issue a notice to the person or entity responsible for the substance or thing. (2) A notice under this section may order the person to whom it is directed to take any or all of the following measures: (a) investigate the situation; (b) take any action specified by the Authority to prevent the offensive odour: (c) minimize or remedy the effects of the offensive odour; and (d) monitor, measure, contain, remove, store, destroy or otherwise dispose of the substance or thing causing the offensive odour or lessen or prevent the offensive odour: (e) install, replace or alter any equipment or thing in order to control or eliminate the offensive odour: construct, improve, extend or enlarge a plant, structure or thing if (f) that is necessary to control or eliminate the offensive odour; (g) take any other action the Authority considers to be necessary; and (h) report on any matter ordered to be done in accordance with directions set out in the order. Visual Nuisance No person shall cause or create a visual nuisance, be it structural (edifice, 8. building etc) or non-structural (refuse, stockpile etc) as a result of a particular operation or activity, which becomes a nuisance. **Responsibility to** 9. It shall be the duty of every owner, occupier or tenant of any lot or premises to avoid visual maintain the same domain in a clean and wholesome condition and free from any nuisance on accumulation which may lead to nuisance by collecting all trash, rubbish kitchen premises. refuse, garbage and disused containers of any kind and depositing the same in the container or drum provided by the contractor responsible for the removal and disposal of garbage or where no such container or drum is provided, deposition must

| Notice re visual<br>nuisance     | be made in a suitable receptacle provided by the owner, occupier or tenant and the receptacle must be placed not more than ten feet from the edge of the road.<br>10. (1) If, at any time, it appears to the Authority or by virtue of complaints received from the general public, that any property when viewed is unsightly or to be likely to be dangerous to human health and the environment, the Authority may issue a notice to remove, clean up, screen that which is making the property unsightly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                  | <ul> <li>(2) The notice shall be directed to the:</li> <li>(a) registered owner, or</li> <li>(b) person in control</li> <li>of the property that is the subject of the environmental notice.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                  | (3) The notice may require the person to whom it is directed to do any or all of the following within a period of time specified in the order, which must not be more than 60 days from the date of the making of the order:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                  | (a) remedy the unsightly condition of the property in the manner and to the extent directed in the notice;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                  | (b) demolish or remove any waste causing or contributing to the unsightliness of the property; and/or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Other nuisances<br>not permitted | <ul> <li>(c) erect a screen which prevents the property from being visible from a public roadway.</li> <li>11. No person shall cause or permit:</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                  | <ul> <li>(a) The building or its appurtenances, open area, roadway or alley to be used, constituted, repaired, altered or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne (dust and other types of particulates shall be kept to a minimum by such measures as wetting-down, covering, landscaping, paving, treating, detouring or by other reasonable means);</li> <li>(b) The burning of refuse or other combustible material so as to cause a nuisance to any other person;</li> <li>(c) The burning of refuse in a commercial area instead of making provision for the removal;</li> <li>(d) The extracting, crushing, screening, handling or conveying of materials or other operations likely to give rise to airborne dust without taking reasonable precautions, by means of spray bars or wetting agents, to prevent particulate material;</li> <li>(e) The discharge, except in accordance with the environmental operating permit, of any wastewater onto any beach or into any surface water ditch, drain or other place of the Port Area;</li> <li>(f) Any accumulation of water, sewage, rubbish, refuse, odour or other fluid or solid substances which permit or facilitate the breeding or multiplication of rodents, insects, parasites, or other vermin and is offensive to the environment and human health;</li> <li>(g) Any premises in which any pig, goat, sheep, cow or horse or any poultry, pigeons or any such animal to be kept and maintained in an unkempt, unsanitary, environment, which may be susceptible to pollution of any</li> </ul> |

water supply or is likely to result in a nuisance; and

- (h) Any premises which is such a state or condition and any building so constructed as to be likely to harbour rats or other vermin.
- Penalty and<br/>Offences12. Any person who fails to correct any breaches of these regulations within the time<br/>permitted in any final administrative order or emergency order shall be guilty of an<br/>offense and may on summary conviction be subject to a fine of \$5,000 or<br/>imprisonment for a term not exceeding three months, or both, and a further penalty of<br/>\$500 for every day during the continuance of the offense.

\_Additional Clauses to Existing Bye-Laws.

#### (ADDITIONAL CLAUSES TO EXISITING BYE-LAWS)

### **CHAPTER 29**

### FREEPORT BYE-LAWS FREEPORT (BUILDING CODE AND SANITARY CODE) BYE-LAWS

### **SECTION 3**

Power to deem a building or structure uninhabitable because of sanitary conditions Where it appears to the Authority that any building or structure is being kept in an unsanitary manner, and that building or structure which potentially jeopardizes the health and safety of the occupants and poses a threat to the environment, the Authority has the power to condemn the building or deem it uninhabitable until all deficiencies are resolved if resolvable.

### FREEPORT BYE-LAWS FREEPORT (WATER PRESERVATION) BYE-LAWS

### **SECTION 5**

#### PART III FURTHER PROVISIONS TO PREVENT WASTE OR POLLUTION

Pollution of water used for human consumption cont'd Every person who keeps or causes to be kept dogs, cats, pigs, goats, sheep, cows, horses, poultry or other fowl within an animal shelter shall ensure that the premises in which such animals or birds are kept are maintained in a clean, wholesome and sanitary condition and that no pollution caused by the handling, storage or disposal of animal excreta, or carcases enters the water supply.

### FREEPORT BYE-LAWS FREEPORT (MARINA AND INLAND WATERWAYS) BYE-LAWS

#### **SECTION 8**

Obstructing an inland waterway Cont'd Clause 9:2 "No person shall sink or place in any inland waterway any object which is likely to form an obstruction to navigation", including derelict vehicles, abandoned boats, barges, metal scraps, construction or dredging piping and traps.

Prohibition to reside on a vessel

(1) No person shall reside on vessels in the inland waterways for extended periods of

| in a inland<br>waterway                                                 | time, on a continual basis for one (1) or more days, except moored to a dock of an existing residence or a designated marina, with the appropriate sewage disposal facilities.                                                           |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prohibition to<br>use inland<br>waterways for<br>commercial<br>ventures | No person shall moor commercial vessels, store traps, and conduct commercial activities in residential areas.                                                                                                                            |
| Operation of a marina                                                   | (1) The operator of a marina shall,                                                                                                                                                                                                      |
|                                                                         | (a) provide at the marina labelled containers for litter in sufficient number and so located that they can be conveniently used by occupants of pleasure boats;                                                                          |
|                                                                         | (b) ensure that the containers are maintained in a sound and sanitary condition; and                                                                                                                                                     |
|                                                                         | (c) dispose of litter in the containers in accordance with all applicable laws.                                                                                                                                                          |
|                                                                         | (2) The operator of a commercial marina shall,                                                                                                                                                                                           |
|                                                                         | (a) provide at the marina or arrange for at another place, a pump-out facility that is<br>easily accessible to, and can be conveniently used by occupants of those pleasure<br>boats using the marina, and which have installed toilets; |
|                                                                         | (b) ensure that at all times during the period of operation of the marina, any pump-out facility at the marina or any alternative facility under the jurisdiction of Port Authority, is in good operating condition;                     |
|                                                                         | (c) remove or cause to be removed sewage from a pleasure boat in which a toilet is installed by means of a pump-out facility at the request of the person in charge of such boat upon payment of fee; and                                |
|                                                                         | (d) transfer and dispose of sewage from any pump-out facility at the marina, or<br>ensure the transfer and disposal of sewage from any pump-out facility arranged for at<br>another place, in accordance with all applicable laws.       |
| Pleasure boats<br>and sewage<br>management                              | <b>4.</b> The owner of a pleasure boat in which a toilet or toilets and storage equipment are installed shall ensure that,                                                                                                               |
|                                                                         | (a) the toilet and equipment are connected in such a manner that the equipment receives all toilet waste from the toilet;                                                                                                                |
|                                                                         | (b) equipment designed for the storage of human excrement is provided with a deck fitting and such connecting piping as is necessary for the removal of toilet waste by shore-based pumping equipment;                                   |
|                                                                         | (c) all parts of the system for removal of toilet waste are congruent with one another and the boat; and                                                                                                                                 |

(d) no means of removal of toilet waste is provided other than the means mentioned in clause (b).

### FREEPORT BYE-LAWS FREEPORT (REMOVAL OF REFUSE) BYE-LAWS

### **SECTION 10**

| Construction and<br>demolition<br>projects.                                             | <ol> <li>It shall be unlawful for the owner, agent or contractor in charge of any<br/>construction or demolition project to cause, maintain, permit or allow to be<br/>caused, maintained or permitted the accumulation of any refuse on the site<br/>before, during or after completion of the construction or demolition project.</li> </ol>                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                         | (2) It shall be the duty of the owner, agent or contractor to have on the site adequate containers for the disposal of refuse and to make appropriate arrangements for its collection or final disposal at an authorized facility.                                                                                                                                                                                                                                                                                                                                                                          |
| Abandoned,<br>junked, or<br>inoperable<br>vehicles.                                     | <ul> <li>(3) The owner, agent or contractor may be required by the Port Authority to show proof of appropriate collection, or if personally transported, of final disposal at an authorized landfill facility.</li> <li>1) It shall be unlawful for any person to abandon a vehicle upon any road right of-way, without the express or implied consent of the owner or person in lawful possession or control of the property (for the purpose of this section, a vehicle shall be presumed to be abandoned if it is left unattended on a road right-of-way for a period in excess of 72 hours).</li> </ul> |
|                                                                                         | (2) It shall be unlawful for any person to cause or permit any scrap metal,<br>dismantled, junk, wrecked, abandoned, or inoperable vehicle(s) or vehicle parts to<br>remain on any property or premises, unless in connection with a lawfully situated and<br>licensed business, or in an enclosed accessory structure, such as a garage, provided<br>such building does not impose a threat to life, safety or an environmental, nuisance or<br>health hazard and is constructed in accordance with the building and sanitary code<br>and zoning regulations, for a period in excess of a month.           |
| -<br>Requirement of<br>an<br>environmental<br>notice for<br>removal of refuse<br>issued | (1) Where an environmental notice has been issued under section 10, the person to whom the notice is issued, may be required to do any or all of the following within a period of time specified in the notice, which must not be more than 30 days from the date of the making of the notice:                                                                                                                                                                                                                                                                                                              |
|                                                                                         | (a) remedy the condition of the property in the manner and to the extent directed in the notice;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                         | (b) demolish or remove any waste detrimental to the amenities of the neighbourhood;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                         | (c) construct or implement an approved screening mechanism to prevent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

| the property or the offensive portion of the property from being visible from a road |
|--------------------------------------------------------------------------------------|
| right-of-way; and                                                                    |

| (d)               | do any other thing, as specified by the notice, to remedy the |
|-------------------|---------------------------------------------------------------|
| degraded state of | of the property or the offensive portion of the property.     |

Liability of the (1) When a notice has been served under section 10 in respect of land that is located Authority for in the Port Area and the person or entity to whom it is directed to, fails to comply costs of cleaning with the notice, The Port Authority may, in writing, request a relevant up vendor/contractor to perform any work required under the notice. (2) When expenses are incurred as a result of the work executed by the relevant vendor or contractor for any work performed as a result of a request by the Port Authority under subsection (1), the Port Authority may serve a copy of the statement of expenses together with a demand for payment, (a) in the case of occupied land, on the occupant and on the registered owner of the land, or (b) in the case of unoccupied land, on the registered owner of the land. Collection of If the person on whom the statement of expenses and demand for payment are served expenses fails to pay the amount set out in the statement within 30 days, the Port Authority may take legal action against the person, at which time the person would be expected to bear the cost of all punitive damages.