INSTRUCTIONAL BOOKLET

FOR

FORM A (Rev 02) – APPLICATION FOR SOURCE REGISTRATION

THE ENVIRONMENTAL MANAGEMENT ACT CHAPTER 35:05

Water Pollution Rules 2001 (as amended)

FORM A PACKAGE

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FORM A SECTION A—GENERAL INSTRUCTIONS

What is Source Registration?
Source Registration is the process whereby all facilities operating in Trinidad and Tobago that release or intend to release water pollutants register as sources of water pollutants with the EMA. Registration does not prevent the continued operation of the facility but is NOT a permit to release water pollutants.

Who Must Apply
With the exceptions described in Section C of these instructions, the Water Pollution Rules 2001 (as amended) and The Water Pollution (Fees) (Amendment) Regulations, 2006 prohibit any facility from discharging water pollutants without applying for a source registration certificate

Where to File
The application forms should be delivered by hand or mail to the Head Office of the Environmental Management Authority (EMA) located at:

8 Elizabeth Street
St. Clair, Port of Spain,

OR
2 Dumfries Road,
La Romaine,
Trinidad & Tobago.

OR
Department of Natural Resources and the Environment (DNRE)
78 Wilson Road, Unit # 6 & 7
Highmoor Centre
Scarborough
Tobago

When to File
Forty-five (45) working days before release of a water pollutant from registrable facilities.

All existing facilities meeting the Water Pollution Rules requirement for source registration should already be registered (*see* **Who Must Apply**).

Fees
A sum of $1000.00 (Trinidad & Tobago Currency) is payable in **cash** or **certified cheque** to the Environmental Management Authority upon submission of a completed application. Invoices from the EMA for the application fee are available upon written request.
Monies can be paid to any branch of the First Citizens Bank (**account number 1183848**) and the receipt must be submitted along with the completed application form.

Availability of Information to the Public
All information contained in this application form will, upon request, be made available to the public for viewing and production of photocopies through the Water Polluters Register located at the EMA's Office or other identified locations. You may request confidential treatment for certain information submitted on this form or as supplementary information to this form.

Signatory Requirements
THE WATER POLLUTION RULES REQUIRE THIS APPLICATION TO BE SIGNED AS FOLLOWS:
A. For a corporation, by the principal executive officer.
B. In other instances by the owner or operator.

Filling out the Form
Unless otherwise specified in instructions to the form, each item must be answered. To indicate that each item has been considered, enter "NA" (i.e., if a particular item is not applicable). Some items in the form require narrative explanation. If more space is necessary to answer a question, attach a separate sheet entitled "Additional Information".

If you have previously submitted information to the EMA, which answers a question and is still valid, you may either repeat the information in the space provided or attach a copy of the previous submission.

FORM A SECTION B: COMPLETING THE APPLICATION FORM LINE—BY—LINE INSTRUCTIONS

All applicants must complete this application form and submit in triplicate.

Please TYPE OR PRINT in the spaces provided.
DO NOT USE PENCIL.
DO NOT LEAVE BLANK SPACES; If an item does not apply to you put N/A OR NA

Item 1.
Indicate renewal if you are in possession of a Source Registration Certificate and are applying for its renewal. If your facility does not have a Source Registration Certificate indicate initial. Indicate "proposed" if the facility is not yet in operation. Indicate "existing" if the facility is already in operation.

Item 2.
Enter the **parent** facility's official or legal name as it appears on the Registrar's Certificate provided by the Registrar General's Office. Do not use any informal name(s), abbreviations or acronyms by which the facility is known.

Item 3.
Enter the official or legal name **of the facility being applied for** as it appears on the Registrar's Certificate provided by the Registrar General's Office. If the facility operates legally without registration, then provide the name under which the facility transacts business. Do not use any informal name(s), abbreviations or acronyms by which the facility is known.

Item 3 a
Please refer to the glossary for explanations of the different facility categories.

Items 3 b
Provide a narrative description of the core nature of business of the facility and the principal product(s), operations or services. Supplement where possible with a flow chart of the process(es) of operation. If more than one process occurs at your facility, please provide a narrative description of each process, ensuring that the core nature of business is highlighted. *Use additional sheets if necessary*

Item 3 c.
Provide a narrative description of the principal raw materials that are used to conduct the core nature of business at your facility. Indicate how each raw material is used in your process and the intended use(s) of each product. An estimate of the quantity of each raw material used monthly should be included in your description. The unit of measurement for the quantities used should be included also e.g. pounds (lbs), litres (L), tonnes (MT), kilogrammes (Kg), etc.

Item 4.
Check the box that most accurately represents the number of employees at the facility (this should include both permanent and temporary/contractual employees).

Item 5.
Check the box that most accurately indicates the age of the facility.

Item 6.
Give the address or location of the facility identified in Item 3 of this form. If the facility lacks a street name, give the most accurate alternative geographic information.
Enter the Universal Transverse Mercator (UTM) Coordinates in the space provided. UTM coordinates can be obtained from the 1:25000 and 1:10,000 Topographic Sheet Maps or bathymetric charts mentioned in item 7 or from Global Positioning Systems (GPS) units. Coordinates must be in Zone 20P and reference WGS 1984 Datum.

Item 6 a.
Fill out table as required. Refer to **Appendix II** in these instructions for guidance on energy blocks.

Item 7.
Check this box to indicate that you attached the required map of the facility. Refer to **Appendix I** in these instructions.

Item 8.
Enter contact information for an individual familiar with facility operations.

FORM A SECTION B: COMPLETING THE APPLICATION FORM
LINE—BY—LINE INSTRUCTIONS

Item 9.
All companies MUST provide evidence of being registered with the Registrar General. Enter corporate officers and director information as needed.

Item 10.
Enter details as required on any permits, licenses held by facility, *e.g.* water abstraction license, power generator license.

Item 11.
Check the box that represents the sewage arrangements at your facility. For Sewage Treatment Plants/Systems provide the details of the treatment process by completing the table provided.

Item 12.
Indicate whether the values provided are actual or estimated by checking the appropriate box.

Provide the quantity of electricity consumed and indicate whether the facility's electrical energy comes from T&TEC or from another source (e.g., a back up generator, or if the plant runs on alternate fuel such as natural gas). Indicate units of electricity consumption as either Kilowatt hours (KWh) or Megawatt hours (MWh).

Provide the quantity of water consumed and indicate whether the water consumed comes from WASA or from another source (e.g. sea, well, river, etc.). Indicate units of consumption as gallons (US/Imperial) or cubic meters (m^3).

Item 13.
Indicate the receiving environment for your facility's effluent by checking the appropriate check box and provide a brief narrative of the composition of the facility's effluent (whether it is strictly process waste or is it commingled with grey water/storm water).

Item 14.
For "Status" of discharge, indicate by checking the appropriate box whether the discharge is existing, proposed, or will be temporary, giving relevant time periods where necessary. For "Frequency" of discharge, similarly indicate whether the discharge is or will be continuous, intermittent or seasonal, giving time details where necessary.

Item 15.
General Instructions
If you have any analytical data you must report it. If no data is available the EMA may require you to conduct analyses to characterize your discharge(s).
Complete one table for each discharge point or outfall. Tick the check box to indicate that you have filled in the discharge characteristics for each discharge point from your facility. Include the name of the discharge point and the volumetric flow rate of discharge.

Item 15 a
A. Reporting. All discharge data must be reported as concentration or other appropriate units as indicated on the table.

B. Sampling. A person certified in performing wastewater sampling should supervise/ collect samples for the reported analyses. Consult *Standard Methods for the Examination of Water and Wastewate*r 19th Ed. (or later edition) for guidance on sampling and the required containers, preservation and holding times for samples. Alternatively you may consult other relevant published documents.
Wherever feasible, the time when you sample should represent your normal operations, including all processes that contribute wastewater during normal operations. Samples should be collected from the center of the flow channel, where turbulence is at its maximum or at a site adequate for the collection of a representative sample.
For effluents from holding ponds or other impoundments with a retention period of greater than 24 hours, a minimum of one grab sample may be taken.

Grab and composite samples are defined as follows:

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Grab sample: An individual sample taken from a waste stream on a one-time basis without the consideration of flow rate or time. The sample must be at least 100 milliliters and collected over a time period not exceeding 15 minutes. Grab samples are used to monitor certain parameters (e.g. pH, temperature, faecal coliforms, cyanide, total phenols, residual chlorine, HEM.)

Composite sample: A combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility. A composite sample is defined by the time interval between aliquots and the volume of each aliquot. Composites can be either flow proportional (i.e. interval time or sample volume may vary) or time proportional (i.e. interval time and sample volume are constant). Composite samples can be used to monitor certain parameters (e.g. metals, nutrients, phenols, chemical oxygen demand) other than those mentioned for grab samples.

Aliquots may be collected manually or automatically.

Data from samples taken in the past (historical data) may be used, provided that:

- all data requirements are met;
- sampling was done no more than five (5) years before submission; and
- all data are representative of the discharge.

C. Analysis. You may consult the document entitled *Standard Methods for the Examination of Water and Wastewater 19th Ed*. (SMEWW) or more recent edition for guidance on test methods. If the method you have used is not listed in the SMEWW you must submit a detailed description of the method or a reference to a published method.

15 b.

Provide a detail description of the following information records relevant to the discharge characteristics provided:

*Sample record*s. These show that the proper sampling protocol was performed in the field. At a minimum, this documentation should include the names of the persons conducting the activity, sample number, sample collection points, maps and diagrams, equipment/method used, climatic conditions, and unusual observations.

*Chain-of-custody record*s. These document the progression of samples as they travel from the original sampling location to the laboratory and finally to their disposal area.

QC sample records. These records document the generation of quality control (QC) samples, such as field, trip, and equipment rinsate blanks and duplicate samples. They also include documentation on sample integrity and preservation and include calibration and standards traceability documentation capable of providing a reproducible reference point. Quality control sample records should contain information on the frequency, conditions, level of standards, and instrument calibration history.

Sample Data. These records contain the times that samples were analyzed to verify that they met the holding times prescribed in the analytical methods. Included should be the overall number of samples, sample location information, any deviations from the standard operating procedures (SOPs), time of day, and date.

Test Methods. Unless analyses are performed exactly as prescribed by SOPs, this documentation will describe how the analyses were carried out in the laboratory. This includes sample preparation and analysis, instrument standardization, detection and reporting limits, and test-specific QC criteria. Documentation demonstrating laboratory proficiency with each method used could be included.

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Quality Assurance/Quality Control (QA/QC) Reports. These reports will include the general QC records, such as initial demonstration of capability, instrument calibration, routine monitoring of analytical performance, calibration verification, etc. Project-specific information from the QA/QC checks such as blanks (field, reagent, rinsate, and method), spikes (matrix, matrix spike replicate, analysis matrix spike, and surrogate spike), calibration check samples (zero check, span check, and mid-range check), replicates, splits, and so on should be included in these reports to facilitate data quality analysis.

NB. The above data records should be specific to the samples collected and analyzed for your facility.

Item 16

Identify any measures (either existing or proposed) that are designed to minimize environmental pollution, particularly water pollution from your facility. These can include: oil/water separators, grease traps, sumps, bio-filtration units for wastewater, designated areas for disposal of oily rags, secondary containment areas or devices, Environmental Management Systems, Spill Prevention Control & Countermeasures Plans, certification from international or national accreditation bodies, *e.g.* ISO, Det Norske Veritas, TTBS, the use of external contractors for disposing of used oil or wastewater, composting kitchen waste etc.

SECTION C—ACTIVITIES EXEMPTED FROM REGISTRATION AS A SOURCE OF WATER POLLUTANTS

You are not required to apply for registration as a source of water pollutants if your discharge is in one of the following categories, as provided by the Water Pollution Rules 4 (5).

A. OPERATIONAL DISCHARGES FROM MOTOR VEHICLES.

Releases from normal operations of any motor vehicle used for transportation are not required to register. However, if the vehicle is being used for purposes other than transportation and releases water pollutants (e.g. from activity as a storage facility, waste treatment facility, seafood processing facility or an oil and gas exploration and production facility),then such motor vehicles must be registered.

B. DISCHARGES FROM HOUSEHOLDS EXCEPT WHERE SUCH HOUSEHOLDS CONTAIN INDUSTRIAL OR COMMERCIAL FACILITIES.

Releases from domestic households such as effluent from the laundry, shower, kitchen, stormwater or sewage are not required to be registered. However, where such households contain industrial and commercial facilities (such as bottling of food and beverages, canning of food, fruits and preserves, hairdressing, car wash facilities, etc), releases from such households must be registered.

C. DISCHARGES AUTHORIZED BY A COMPETENT GOVERNMENTAL ENTITY INTO SEWERAGE FACILITIES OWNED OR OPERATED BY SUCH COMPETENT GOVERNMENTAL ENTITY.

The authorized release of sewage into sewerage facilities does not require registration. However, the owner or operator of the sewage/wastewater treatment works itself must be registered and proof that the Water and Sewerage Authority authorised the discharge of effluent to the sewer MUST be provided.

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SECTION D—GLOSSARY

NOTE: This Glossary includes terms used in the Instructional Booklet and in Form A. If you have any questions concerning the meaning of any of these terms or of terms used in the documents but not in the Glossary, please contact the Authority.

AGRICULTURAL means pertaining to horticulture, fruit growing, seed growing, dairy farming, the breeding and keeping of livestock (including animals kept for the production of food, clothing, or for farming of land), the use of land as grazing land, meadow land, osier land, market gardens and nursery grounds, and use of land for woodlands where that use is ancillary to the farming land for other purposes.

ALIQUOT means a sample of specified volume used to make up a total composite sample.

BATHYMETRIC CHART is a three-dimensional representation on a two-dimensional scale of underwater terrain that shows *inter alia*, depth contours, geographic coordinates and prevailing winds and currents.

COASTAL NEARSHORE means the area of the marine environment which extends no more than three nautical miles from the high water mark.

COMMERCIAL means of or pertaining to business or trade.

CONTAINER means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

CONTINUOUS DISCHARGE means a release to the environment that occurs without interruption during normal operations except for infrequent shutdowns for maintenance, process changes, etc.

CORPORATE OFFICER means—

(a) the chairman, deputy chairman, president or vice-president of the board of directors;
(b) the managing director, general manager, comptroller, secretary or treasurer; or

(c) any other duly appointed person who performs functions similar to those performed by the holder of an office specified in (a) or (b).

FACILITY means any location within the environment, and any premises, vehicles, buildings, process, equipment, development, or natural or man-made structure at such location, from which water pollutants may be released.

INDUSTRIAL means of or pertaining to the manufacture, processing, handling, transport, storage or disposal of materials (including raw materials, materials in the process of manufacture, manufactured materials, byproducts and waste materials).

INLAND SURFACE WATERS means the water from rivers, creeks, tidal waters, estuaries, swamps, streams, lakes and impounded reservoirs that flows over or rests upon the land surface of Trinidad and Tobago and in dry conditions includes the area over which such waters flowed or rested.

INSTITUTION includes health care establishments, hospitals, prisons, schools and zoos

INTERMITTENT DISCHARGE means a discharge or series of discharges for which the combined length of time for all discharges does not exceed two (2) hours in a 24 hours period.

SECTION D- GLOSSARY

TOPOGRAPHIC MAP is a map representing the three (3) dimensions of terrain on a two (2) dimensional surface. They usually portray both natural (e.g., mountains, valleys, plains, lakes, rivers and vegetation) and manmade features e.g. roads, boundaries, transmission lines and major buildings. The use of contour lines to portray the shape and elevation of the land distinguishes topographic from other maps.

TREATMENT means any method, technique, or process, including neutralization, designed to change the physical, chemical or biological character or composition of any waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or as to render such waste innocuous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.

UPSET means an exceptional incident where there is unintentional and temporary non-compliance with permit limits because of factors beyond the reasonable control of the facility operator. An upset **does not include** non-compliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance or careless or improper operation.

UTM means Universal Transverse Mercator. The UTM system provides coordinates on a worldwide flat grid for easy computation. Excluding Polar Regions, the UTM Coordinate system divides the World into 60 zones, each 6 degrees longitude wide, *and extending from 80 degrees south latitude to 84 degrees north latitude.*

The first UTM zone starts at the International Date Line (longitude 180 degrees) *proceeding eastward.* Any point can be described by its distance east of the origin (known as 'eastings').In the northern hemisphere the origin is the equator and all distances north (known as 'northings') are measured from the equator. In the southern hemisphere the origin is the South Pole and all northings are measured from there.

Note that Trinidad and Tobago lies in Zone 20P

(*Image adapted and modified from: http://upload.wikimedia.org/wikipedia/commons/e/ed/Utm-zones.jpg <Date Accessed: March 9, 2009>*)

WETLANDS are 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 marine water the depth of which at low tide does not exceed six meters and may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six meters at low tide lying within the wetlands.

SECTION D- GLOSSARY

MANUFACTURING means any process that transforms raw material(s) into finished products.

MARINE OFFSHORE means that area of the marine environment seaward of the coastal nearshore.

MINING means excavating or quarrying in, on or, below the surface for the purpose of winning or obtaining minerals and includes any operations directly or indirectly necessary for or incidental to mining operations.

REGISTRABLE FACILITY means—
(a) an industrial facility;
(b) a commercial facility;
(c) an agricultural facility;
(d) an institution; and
(e) a sewerage facility involved in treating discharge from a facility or institution listed in (a) to (d) above.

WASTEWATER TREATMENT PLANT means any device or system used in the treatment of sewage or industrial wastes of a liquid nature. This definition also includes any sewers, pipes, or other conveyances **only** if they convey wastewater to a sewage treatment facility providing treatment.

WATER TREATMENT PLANT means any device or system used in the treatment of water so that it achieves potable quality for distribution. This definition also includes any infrastructure associated with the device or system so used.

WELL INJECTION means the sub-surface emplacement of fluids through a bored, drilled or driven well or through a dug well, where the depth of the dug well is greater than the largest surface dimension.

SECTION E—EXAMPLES OF COMMON SOURCES OF WATER POLLUTION

CLEANING LIQUIDS

Dishwashing detergents, bleach, laundry detergents, carpet cleaners, oven cleaners, bathroom cleaners, tile cleaners, pool cleaners, carwash cleaners, degreasers, waxes, polishes.

CONCENTRATED ANIMAL FEEDING OPERATIONS: ANIMAL FARMS/ AQUACULTURE

Biocides, hormones, faecal matter, cleaning agents.

COSMETOLOGY (BEAUTY SALONS/BARBERSHOPS)

Nail polish, nail polish removers, hardeners, facial care products, e.g. moisturizers, toners, astringents; hair removal chemicals, massage oils, spas.

FISH/MEAT PROCESSING

Preservatives, entrails, blood, faeces and other animal by-products.

FOOD & BEVERAGES

Cooking oils, fats, grease, food dyes, food wastes (entrails, blood, faeces and other animal by-products).

FUELS, OILS, LUBRICANTS

Petrol, automobile oils, diesel, lubricants, kerosene, machine oils, battery acids, radiator coolants, transmission/power steering fluids.

GARDENING

Fertilizers, pesticides, weedicides.

HAIRCARE PRODUCTS

Shampoos, conditioners, hair dyes and colouring agents, hair relaxers/straightners, mousse and gels.

PAINTS, INKS, DYES

Paints, thinners, solvents, varnishes, inks, dyes, toners.

PHOTO DEVELOPING

Developer, fader, stop bath, film conditioner (hardening & bleaching agents), cleaning agents.

POTTERY & CERAMICS

Paints, muds.

TEXTILE MANUFACTURING

Dyes.

APPENDIX I: Map of Hypothetical Facility Illustrating Minimum Requirements for Item 7 on Form A

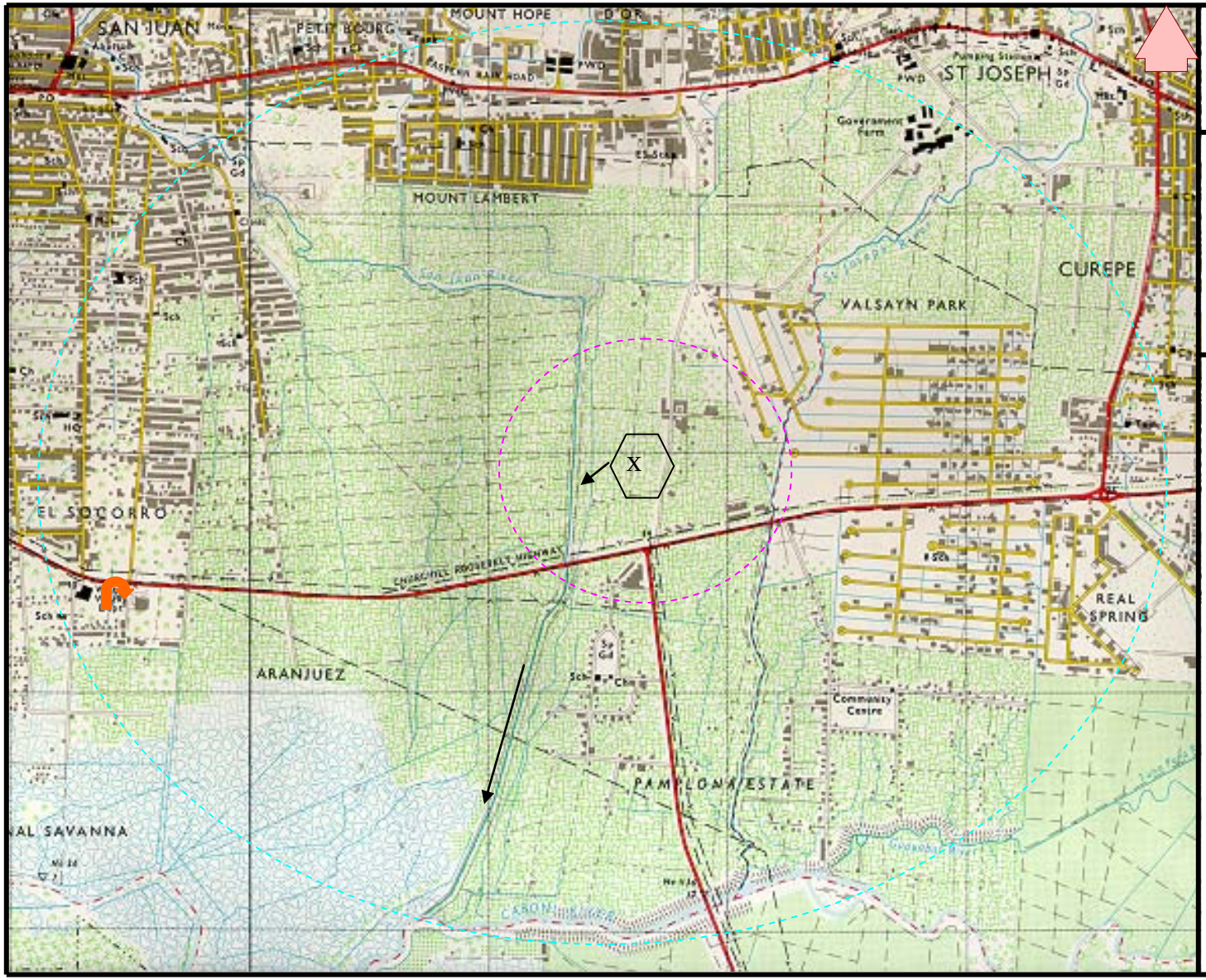

Figure A-1. Allied Ltd.
UTM Co-ordinates
mE – 639000 mN - 1175600

This computer-assisted map has been created using the 1:25000 topographic map. It is for illustration only and does not represent any real facility. The EMA shall not be liable for any damages resulting from the reliance upon the information shown.

LEGEND

- X — Allied Ltd. Facility
- Facility Boundary
- Waterworks
- Outfall
- 1 kilometre radius
- 3 kilometre radius

0 1 2
Kilometres

Map not drawn to scale

APPENDIX II: Energy Blocks—Offshore Licensed and Open Acreage