



*Estado Libre Asociado de Puerto Rico*  
*Gobierno Municipal de Naguabo*  
*Oficina del Alcalde*

*Hon. Wilfredo Astacio Santiago*  
*Alcalde*

November 20, 2008



Carl Axel P. Soderberg  
Director  
Caribbean Environmental Protection Division  
United States Environmental Protection Agency  
Multi-Media Permits and Compliance Branch  
Centro Europa Building, Suite 417  
1492 Ponce De León Avenue  
San Juan, PR 00907

Notice of Intent for General Permit for Discharges from Small Municipal Separate Storm Sewer Systems

Dear Mr. Soderberg:

In compliance with the provisions of the Clean Water Act, the Municipality of Naguabo must submit a Notice of Intent to obtain the authorization to discharge pollutants to waters of the United States in accordance with the conditions and requirements set forth in 40 CFR 122.33.

It is our privilege to present to the EPA, Naguabo's Notice of Intent to obtain the NPDES permit for the municipality's Storm Sewer System Discharge.

If you need more information, you can contact Mr. Richard Fuentes, Director of the Department of Transportation and Public Works at (787) 874-2365 Ext. 254.

Sincerely,

*Wps*  
Hon. Wilfredo Astacio Santiago  
Mayor

*¡Hacia una Ciudad de Futuro!*



3-21  
FFIO  
MUNICIPALITY OF NAGUABO  
Estado Libre Asociado de Puerto Rico  
PO Box 40  
Naguabo, PR 00718

Honorable Wilfredo Astacio Santiago  
Mayor

---

## NOTICE OF INTENT

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
(NPDES) PHASE II, REGULATED SMALL MUNICIPAL SEPARATE  
STORM SEWER SYSTEMS (MS4's)

INDIVIDUAL PERMIT

MUNICIPALITY OF NAGUABO  
EPA REGION 2 PUERTO RICO

PREPARED BY RIQUEL

REVIEW BY MUNICIPALITY OF NAGUABO

NOVEMBER 2008

## EXECUTIVE SUMMARY

The content of this report was created based on the research performed with local environmental agencies in Puerto Rico and information gathered thru meetings with community representatives from the Municipality of Naguabo.

The Storm Water Notice of Intent presented in this report includes general information on the permittee, the nature of their business, a description of the characteristics and hydrology of the Naguabo municipality, person (s) responsible for implementing the plan and the MS4 main users.

## INTRODUCTION

In 1987 the Environmental Protection Agency (EPA) amended the Clean Water Act (CWA), requiring the implementation of a two phase program for addressing storm water discharges. On December 9, 1999 EPA published the second phase of the storm water regulations (64 FR 68721). As outlined in these regulations, municipal separate storm sewer systems (MS4's) serving populations of more than 50,000 and/or processing a density of 1000 people per square mile are required to obtain a General Phase II National Pollutant Discharge Elimination System (NPDES) Permit. The EPA is yet to issue a general NPDES Phase II permit for regulated MS4s. The EPA is requesting municipal storm sewer operators to apply for an individual NPDES permit as required by 40 CFR 122.33.

The Municipality of Naguabo is required to submit an application for permit coverage. We hereby present to the EPA, Naguabo's Notice of Intent (NOI) to obtain the individual NPDES permit for the municipalities storm sewer system discharge.

## PERMITTEE GENERAL INFORMATION

The Naguabo MS4 is currently owned and operated by the municipality under the direction of its mayor, Hon. Wilfredo Astacio Santiago. The Department of Transportation and Public Works, DTPW, will be the office responsible to implement and uphold the proposed storm water program. Mr. Richard Fuentes, director of DTPW, will be the person responsible for assuring the program maintains its proposed schedule.

The Municipality of Naguabo is located on the East coast of Puerto Rico. It is bordered on the north by Río Grande and Ceiba municipalities, by Humacao municipality and the Vieques Passage on the south, Ceiba municipality and the Vieques passage on the east, and Las Piedras municipality on the west; it has a territorial extension of 72.26 square miles.

Naguabo possesses a population of 23,753 inhabitants, according to the 2000 Census.

Naguabo is divided into nine wards: Daguao, El Duque, Playa Húcares, Santiago y Lima, Maizales, Mariana, Peña Pobre, Río Blanco y Pueblo.

A map detailing the urban area of the town is provided on Figure 1 of this report.





Naguabo Municipality's Soils consists of four different associations. However, the urban area is located on the Mabi-Rio Arriba-Cayagua Association.

Topographically it is part of the eastern coastal valley region, where the Naguabo Valley is located. The northern part is within the Luquillo Mountain Range. Within some of its hills are two of greater elevations in this mountain range, the Picos of the Este and the Oeste, respectively with 1,051 and 1,020 meters of altitude above sea level. The rest of the territory of this municipality is level.

The town of Naguabo is irrigated by the Dagua, Santiago, and Blanco rivers (also known as the Naguabo River). The Blanco River is the largest of its water bodies and springs from Blanco ward, running approximately 17 kilometers (10.5 miles) until emptying into the Caribbean Sea. Its tributaries are Cubuy River (also a tributary of the Sabana, Icados, and Prieto rivers) and Peña Pobre, Sonadora, Vaca, and Maizales brooks. The Santiago River originates in Duque Ward, running for about 9 kilometers (5.5 miles) and the Dagua River is its tributary. Quebrada Grande stream is in the boundary with Ceiba municipality. The Palma Brook and its tributary, the Del Plátano brook, as well as the Botija Brook run through Naguabo.

Figure 2 depicts the municipality's hydrology.

## ACTIVITIES SUBJECT TO NPDES PERMIT APPLICABILITY

The municipality of Naguabo operates a municipal separate storm sewer system located in the urban area of the Municipality.

Naguabo's urban area is located south of the municipality's territory and also south of Highway 53. It comprises the Pueblo Ward and parts of Maizales, Duque, Húcares, and Río wards. The Pueblo Ward is bordered on the east side by Rio Santiago.

The Naguabo urban area has a population of 4,432 in a total area of 0.62 square miles. Population density per square mile of land area is 7,162.7.

The main users of the Naguabo MS4 are residential communities, schools, and industries located in the urban region of the town. Approximately 4 schools and 2 hospitals have been identified within the delineated urban area of Naguabo.

The primary pollutant sources of the Naguabo MS4 are overflows in the sanitary sewer system due to sanitary pump system malfunctions.

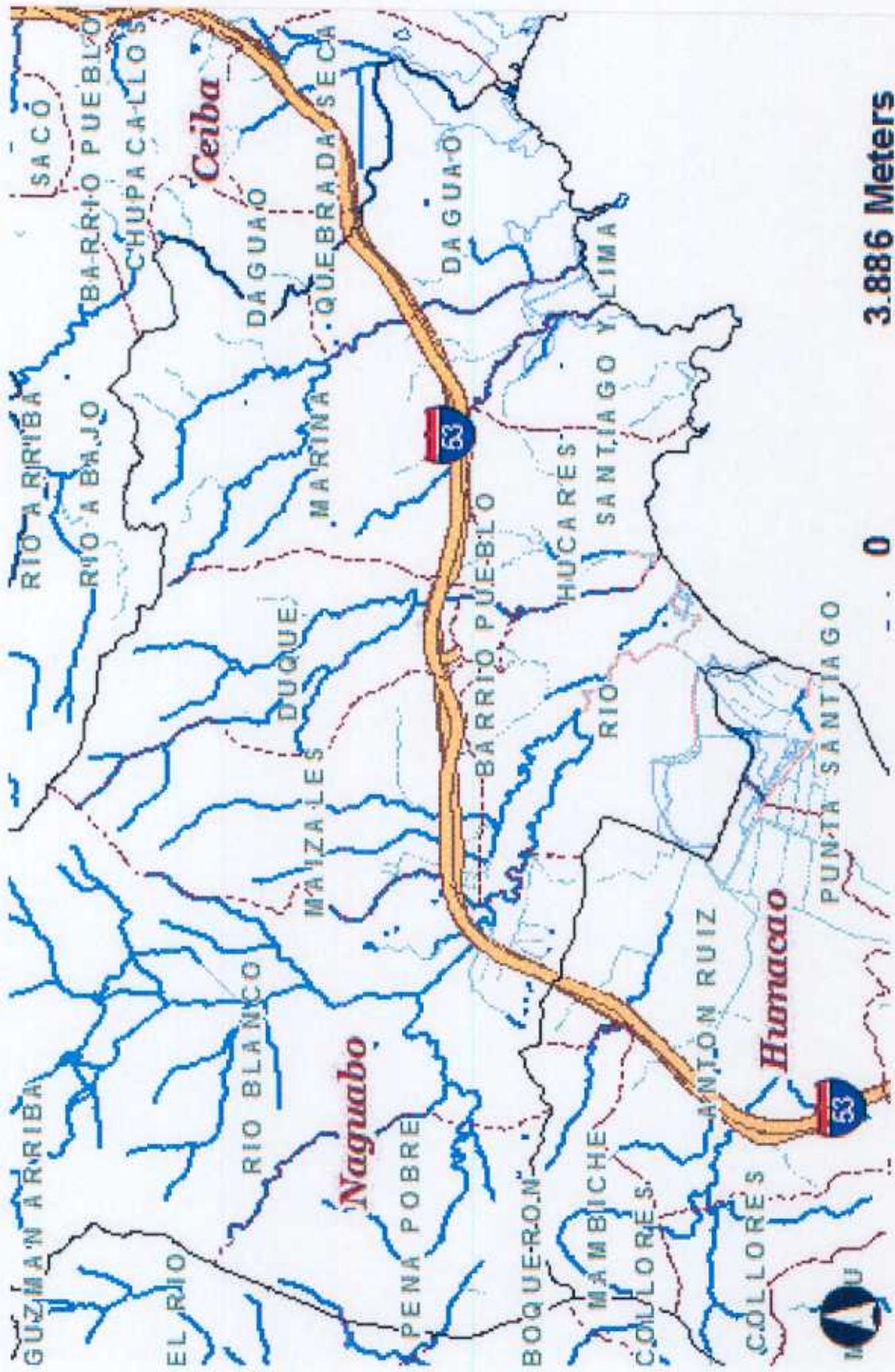


FIGURE 2: NAGUABO'S HYDROLOGY MAP

NAME, MAILING ADDRESS, AND LOCATION OF FACILITY FOR WHICH THE APPLICATION

Municipality of Naguabo  
P.O. Box 40  
Naguabo, P.R. 00718-0040  
Tel: 787-874-2365

STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE

The SIC Code established by the federal Office of Management and Budget for public administration for local government activities is 9199.

OPERATOR NAME (S), ADDRESS (ES), TELEPHONE NUMBER (S)

Mr. Richard Fuentes  
Director, Department of Transportation and Public Works  
10 Baldorioty Street  
Naguabo, Puerto Rico · 00718  
(787) 874-2365 ext. 254

PERMITS OR CONSTRUCTION APPROVALS RECEIVED OR APPLIED UNDER THE FOLLOWING PROGRAMS:

Resource Conservation and Recovery Act

None

Underground Injection Control under the Safe Drinking Water Act

None

NPDES Program under the Clean Water Act

None

Nonattainment Program under the Clean Air Act

None

National Emissions Standards for Hazardous Air Pollutants Preconstruction Approvals under the Clean Air Act

None

Ocean Dumping Permits under the Marine Protection Research and Sanctuaries Act

None

Dredge or Fill Permits under Section 404 of the Clean Water Act

None

Puerto Rico Environmental Quality Board (DS-1)

Permit to Transport Non-Hazardous Solid Wastes (SR-65-0418)  
Used Oil Generator Permit (AU-97-53-1580)

Puerto Rico Department of Natural Resources and the Environment

None

**STORM WATER SEWER MAP**

The Municipality of Naguabo Storm Water Sewer System in the urban area in general consist of a series of open channel culverts and catch basins, located within the right-of-way of municipal and state roads, interconnected by underground concrete or PVC pipes which normally discharge to the Los Muertos Creek, a tributary of Rio Blanco on the west side of the urban zone (Pueblo Ward). Another area (20 percent) of the municipal storm sewer system of the Pueblo Ward, discharges on the Rio Santiago on the east side of the urban zone. As a summary, the Urban Area of the Naguabo Municipality is part of two watersheds.

Included in Figure 3, is a topographic map depicting the watersheds and the runoff behavior of the Naguabo Urban Area.

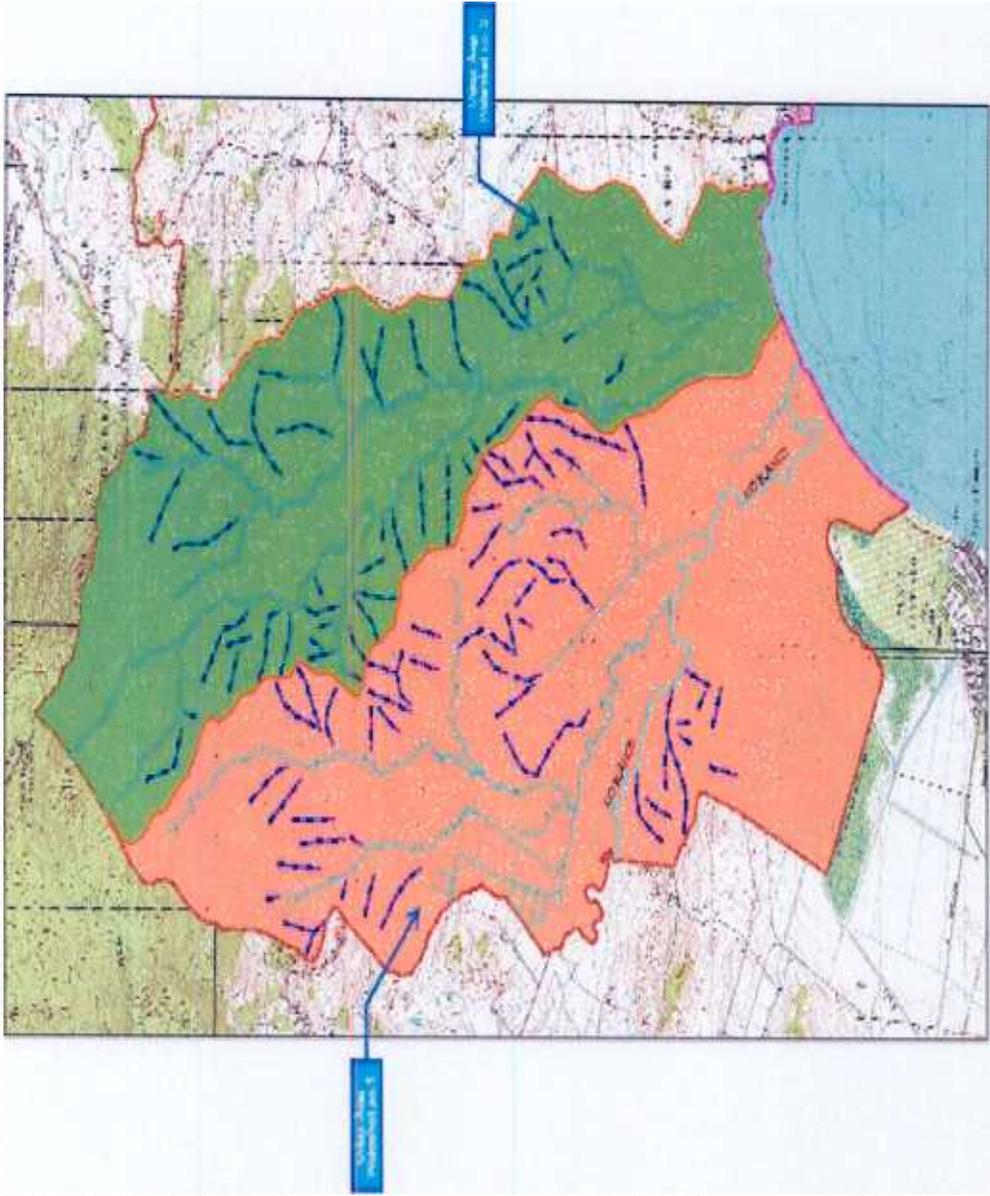


FIGURE 3: URBAN AREA WATERSHEDS

## NATURE OF THE BUSINESS

The Naguabo Municipality is a government public entity under the Commonwealth of Puerto Rico, whose institutional mission statement is to work hard to provide their people with excellent service, through the efficient use of their economic resources.

The municipality is planned as an urban-economic development of cutting edge, focused on its commitment to social harmony and solidarity with the needs of their people.

## ESTIMATED SQUARE MILEAGE SERVED BY THE MS4

The Naguabo urban area has a population of 4,432 in a total area of 0.62 square miles. Population density per square mile of land area is 7,162.7.

The municipality has a territorial extension of 72.26 miles of which 0.62 square miles are classified as urban area (for purposes of our MS4 management plan, only the delineated urban area is considered the service area of the municipality storm sewer system).

## BEST MANAGEMENT PRACTICES

### Minimum Control Measure 1 – Public Education and Outreach

- ❖ *School Educational Campaign*
- ❖ *Newspaper Campaign*
- ❖ *Distribution of Storm Water Related materials: pamphlets, booklets, and flyers*

### Minimum Control Measure 2 – Public Involvement and Participation

- ❖ *Annual Cleanup (rivers, streams, catch basins)*
- ❖ *Reforestation Programs*

### Minimum Control Measure 3 – Illicit Discharge Detection and Elimination

- ❖ *Storm sewer system map*
- ❖ *Educate Public Employees and commercial and industrial property owners*
- ❖ *Program to detect, identify and eliminate illicit discharges*
- ❖ *Program to detect, identify and eliminate illegal dumping*
- ❖ *Program to detect, identify and eliminate wastewater connections to the storm drain system*

- ❖ *Program to detect, identify and eliminate sanitary sewer overflows*
- ❖ *Program to detect, identify and eliminate failing septic systems*

Minimum Control Measure 4 – Construction Site Storm Water Runoff Control

- ❖ *Site Inspection and Enforcement*

Minimum Control Measure 5 – Post Construction Storm Water Management in  
Development and Re-development

- ❖ *BMP Inspection and Maintenance*

Minimum Control Measure 6 – Pollution Prevention (Good Housekeeping for  
Municipal Operations)

- ❖ *Municipal Employees Training*
- ❖ *Parking Lot and Street Cleaning Program*
- ❖ *Storm Drain System Cleaning Program*
- ❖ *Spill Response and Prevention Program*
- ❖ *Used Oil Recycling Program*
- ❖ *Recycling*

**PERSON RESPONSIBLE FOR IMPLEMENTING OR COORDINATING THE  
APPLICANT'S STORM WATER MANAGEMENT PROGRAM**

Mr. Richard Fuentes  
Director, Department of Transportation and Public Works  
10 Baldorioty Street  
Naguabo, Puerto Rico  
(787) 874-2365 ext. 254

**PERSON RESPONSIBLE FOR IMPLEMENTING OR COORDINATING THE  
APPLICANT'S STORM WATER MANAGEMENT PROGRAM**

Mr. Héctor Machín  
Director of Finances  
P.O. Box 40  
Naguabo, P.R. 00718-0040  
Tel: 787-874-2365