

CAROLINA RWWTP EJ ANALYSIS

1. Introduction and summary

- A. Briefly describe EO 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," etc.

The U.S. Environmental Protection Agency (EPA), Region 2, has performed an Environmental Justice (EJ) analysis in accordance with the President's Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Population and Low-Income Populations" following the Regional Policy. Environmental Justice is the right to a safe, healthy, productive and sustainable environment for all, where "environment" is considered in its totality to include the ecological, physical, social, political, aesthetic and economic environments.

Executive Order 12898 (the "Order") was signed by President Clinton on February 11, 1994, to focus federal attention on the environmental and human health conditions of minority and low-income populations with the goal of achieving environmental protection for all communities. The Order directed federal agencies to develop environmental justice strategies to help federal agencies identify and address disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority and low-income populations. The Order is also intended to promote nondiscrimination in federal programs substantially affecting human health and the environment, and to provide minority and low-income communities' access to public information in matters relating to human health. The Order underscores certain provisions of existing law that can help ensure that all communities and persons across the nation live in a safe and healthful environment.

It is important to note that the major tenet of environmental justice is the fair treatment and meaningful involvement of the affected community in carrying out the Agency's and the Region's programs, policies and activities. Fair treatment and meaningful involvement should not be understood to mean preferential treatment for certain communities. Rather, these principles should be understood to mean the Agency and Region will continue to provide equal protection and access to information to all served communities. Fair treatment and meaningful involvement may include, but not be limited to ensuring to the extent possible and practicable, the following:

- that notices about public meetings are disseminated in local media used by the community, and that such notices are translated into appropriate languages other than English, if a community is largely non-English speaking;
- that environmental laws are enforced equally in all communities;
- that Regional managers and their staff understand and are aware of cultural differences and unique dependence some communities, such as tribal nations and indigenous peoples, have upon their land for subsistence fishing and hunting; and

- that communities have access to accurate, timely and reliable information.

B. Summarize the factual conclusions of the EJ analysis and any linkages to proposed permit terms or other permit outcomes

After considering the EJ indexes, demographic information and proximity to residential areas (as shown in maps below), the community that directly surrounds Isabela WWTP would be considered a community with issues of EJ concern.

2. Proposed permitted activity and regulatory framework (Worksheet section

- A. Describe the requested permit action (e.g., new permit or renewal), the facility and the applicable regulatory framework (e.g., CAA/PSD, CWA/NPDES, SDWA/UIC, RCRA, TSCA)

Renewal of CWA/NPDES minor permit for PRASA Isabela WWTP in Puerto Rico.

The effluent limitations and permit conditions in the permit have been developed to ensure compliance with the following, as applicable:

- Clean Water Act section 401 certification requirements;
- NPDES regulations (40 CFR Part 122); and
- PRWQS (April 2019).

- B. Note other types of permits required by EPA statutes (e.g., PSD, NNSR, NPDES, UIC, RCRA, TSCA) that are in place or are being sought for the same facility, and the agency responsible for issuing that permit or identified by the permit applicant (e.g., EPA, state or local agency), as indicated by EPA's ECHO database [<https://echo.epa.gov>, select "Single Facility Search]

There are no other permits required by EPA Statutes. However, the Permittee has a Consent Decree with the Agency **Civil Action No 3:15-CV-02283(JAG)** in which the facility is included. This consent decree does not affect this permit action.

3. Geographic area(s) identified by screening step per Regional Implementation Plan

- A. Identify area(s) (with maps, if practicable) near the facility that the EJ in Permitting screening process has prioritized for EJ analysis.



Mapa Topográfico - PAS Carolina - NPDES # PR0023752

Carr. 187 Km. 16.5 Torreella Alta, Carolina, Puerto Rico



1:20,000



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B. Explain how the area(s) were identified (e.g., use of EJSCREEN; information contained in the permit application or developed by the permitting program indicating areas of pollution impacts/plumes)

Satellite maps were found using the facility information on the NPDES application and EJSCREEN, which was also used to create a 1.0-mile buffer around the facility. Based on the images above, we can conclude that the area surrounding the water treatment plant is partially residential.

4. Description of communities identified by screening step (Worksheet section 4)

A. Social Demographics. This information, in conjunction with the health information below, may help identify a community's potential vulnerabilities.



EJSCREEN Report (Version 2019)
1.0 miles Ring Centered at 18.438376,-65.888395
PUERTO RICO, EPA Region 2
Approximate Population: 2,821
Input Area (sq. miles): 3.14
 Carolina RWWTP

Selected Variables	Value	State		EPA Region		USA	
		Avg.	%tile	Avg.	%tile	Avg.	%tile
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ozone (ppb)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.0993	0.191	52	N/A	N/A	N/A	N/A
NATA* Air Toxics Cancer Risk (risk per MM)	18	21	37	N/A	N/A	N/A	N/A
NATA* Respiratory Hazard Index	0.27	0.3	43	N/A	N/A	N/A	N/A
Traffic Proximity and Volume (daily traffic count/distance to road)	210	320	65	N/A	N/A	N/A	N/A
Lead Paint Indicator (% pre-1960s housing)	0.27	0.15	86	N/A	N/A	N/A	N/A
Superfund Proximity (site count/km distance)	0.043	0.16	12	N/A	N/A	N/A	N/A
RMP Proximity (facility count/km distance)	1.1	0.93	73	N/A	N/A	N/A	N/A
Hazardous Waste Proximity (facility count/km distance)	0.21	0.76	45	N/A	N/A	N/A	N/A
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	1.1	3.4	92	N/A	N/A	N/A	N/A
Demographic Indicators							
Demographic Index	93%	86%	74	N/A	N/A	N/A	N/A
Minority Population	100%	99%	100	N/A	N/A	N/A	N/A
Low Income Population	85%	73%	72	N/A	N/A	N/A	N/A
Linguistically Isolated Population	87%	69%	91	N/A	N/A	N/A	N/A
Population with Less Than High School Education	26%	25%	55	N/A	N/A	N/A	N/A
Population under Age 5	6%	5%	63	N/A	N/A	N/A	N/A
Population over Age 64	18%	18%	53	N/A	N/A	N/A	N/A

*The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: www.epa.gov/environmentaljustice

The area around Carolina WWTP includes a 100% minority population, a largely linguistically isolated population, and an 85% low income population. This indicates that the area could be a community of EJ community.

B. Environment/Land Use Information. This information can help determine whether a community may be considered overburdened from other sources of pollution not directly related to the action being permitted and also identify potential pathways for exposure.



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Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA
EJ Indexes			
EJ Index for Particulate Matter (PM 2.5)	N/A	N/A	N/A
EJ Index for Ozone	N/A	N/A	N/A
EJ Index for NATA* Diesel PM	70	N/A	N/A
EJ Index for NATA* Air Toxics Cancer Risk	60	N/A	N/A
EJ Index for NATA* Respiratory Hazard Index	60	N/A	N/A
EJ Index for Traffic Proximity and Volume	79	N/A	N/A
EJ Index for Lead Paint Indicator	78	N/A	N/A
EJ Index for Superfund Proximity	52	N/A	N/A
EJ Index for RMP Proximity	80	N/A	N/A
EJ Index for Hazardous Waste Proximity	68	N/A	N/A
EJ Index for Wastewater Discharge Indicator	96	N/A	N/A

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/Region/US