

MAYAGUEZ 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 (2 miles radius) the **Mayaguez RWWTP** 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 Mayaguez RWWTP** 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 (August 2022).

- 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.

1 mile Ring Centered at 18.248587,-67.154944, PUERTO RICO, EPA Region 2

Approximate Population: 1,577

Input Area (sq. miles): 3.14



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 **2-mile buffer** around the facility. Based on the image 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 2.1)



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Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Socioeconomic Indicators					
Demographic Index	77%	83%	20	35%	94
People of Color	99%	99%	29	40%	96
Low Income	55%	72%	19	30%	84
Unemployment Rate	24%	15%	77	5%	97
Limited English Speaking Households	57%	68%	25	5%	98
Less Than High School Education	21%	22%	48	12%	81
Under Age 5	2%	4%	37	6%	23
Over Age 64	30%	20%	80	16%	88

The area around **Mayaguez RWWTP** includes a 99% minority population, a largely linguistically isolated population, and an 55% 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.

The Environmental Indicators surrounding the **Mayaguez RWWTP** are shown in the Table below. Indicators as the National-Scale Air Toxic Assessment (NATA) is EPA's ongoing, comprehensive evaluation of toxics in the United States. EPA developed this tool to prioritize air toxics, emissions sources and location of interest for further studies. It is important to mention that NATA provides broad estimates of health risks over geographic areas, not definitive risks to specific individuals or locations. These indicators are lower in the Mayaguez RWWTP surrounding area than the rest of the Island. Therefore, EPA concludes that the potential for a disproportionate and/or adverse environmental burden in the area is minimal to none in this area.



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Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 ($\mu\text{g}/\text{m}^3$)	N/A	N/A	N/A	8.67	N/A
Ozone (ppb)	N/A	N/A	N/A	42.5	N/A
Diesel Particulate Matter* ($\mu\text{g}/\text{m}^3$)	0.0572	0.108	54	0.294	<50th
Air Toxics Cancer Risk* (lifetime risk per million)	21	23	0	28	<50th
Air Toxics Respiratory HI*	0.2	0.21	0	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	220	610	50	760	48
Lead Paint (% Pre-1960 Housing)	0.087	0.14	47	0.27	32
Superfund Proximity (site count/km distance)	0.062	0.15	38	0.13	51
RMP Facility Proximity (facility count/km distance)	2.5	0.97	91	0.77	93
Hazardous Waste Proximity (facility count/km distance)	0.19	0.9	39	2.2	31
Underground Storage Tanks (count/km ²)	0.25	1.7	60	3.9	33
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.11	5	81	12	85

For additional information see: <https://www.epa.gov/ejscreen>