

ESPINO WTP 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 Espino WTP 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 Vega Baja WWTP in Puerto Rico.

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

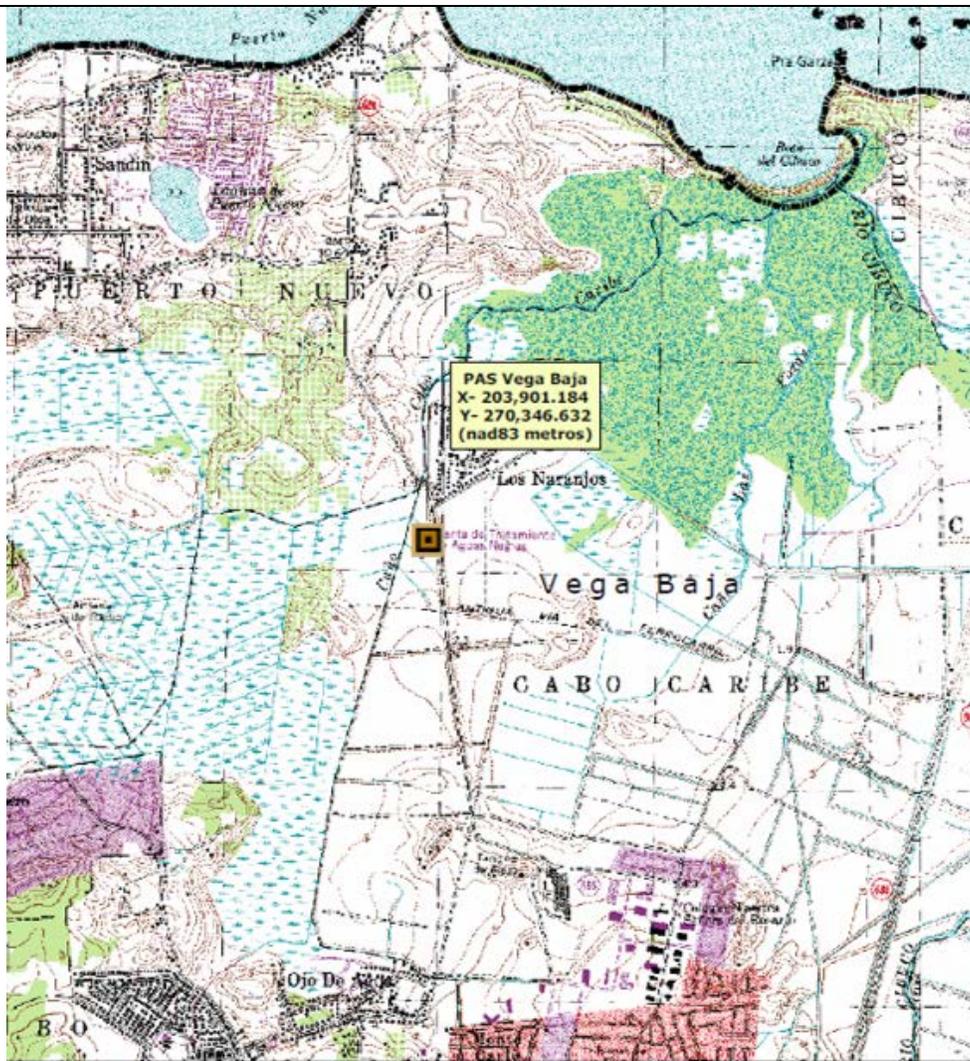
- Clean Water Act section 401 certification requirements;
- NPDES regulations (40 CFR Part 122); and
- PRWQS (March 2016).

- 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.





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 one-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.

The area around Vega Baja WTP includes a 98% minority population, a largely linguistically isolated population, and a 77% low income population. This indicates that the area could be a community of EJ concern.



EJSCREEN Report (Version 2016)



1.5 mile Ring Centered at 18.469483, -66.396488, PUERTO RICO, EPA Region 2

Approximate Population: 10,020

Input Area (sq. miles): 7.06

Vega Baja

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
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 ($\mu\text{g}/\text{m}^3$)	0.524	0.781	60	N/A	N/A	N/A	N/A
NATA* Cancer Risk (lifetime risk per million)	33	34	62	N/A	N/A	N/A	N/A
NATA* Respiratory Hazard Index	0.98	1.1	62	N/A	N/A	N/A	N/A
Traffic Proximity and Volume (daily traffic count/distance to road)	44	140	53	N/A	N/A	N/A	N/A
Lead Paint Indicator (% Pre-1960 Housing)	0.072	0.15	40	N/A	N/A	N/A	N/A
Superfund Proximity (site count/km distance)	0.32	0.15	91	N/A	N/A	N/A	N/A
RMP Proximity (facility count/km distance)	0.058	0.51	1	N/A	N/A	N/A	N/A
Hazardous Waste Proximity* (facility count/km distance)	0.086	0.08	85	N/A	N/A	N/A	N/A
Water Discharger Proximity (facility count/km distance)	0.56	0.41	80	N/A	N/A	N/A	N/A
Demographic Indicators							
Demographic Index	87%	86%	43	N/A	N/A	N/A	N/A
Minority Population	98%	99%	8	N/A	N/A	N/A	N/A
Low Income Population	77%	73%	48	N/A	N/A	N/A	N/A
Linguistically Isolated Population	53%	70%	12	N/A	N/A	N/A	N/A
Population With Less Than High School Education	39%	28%	77	N/A	N/A	N/A	N/A
Population Under 5 years of age	7%	6%	69	N/A	N/A	N/A	N/A
Population over 64 years of age	16%	16%	54	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>.

+ The hazardous waste environmental indicator and the corresponding EJ index will appear as N/A if there are no hazardous waste facilities within 50 km of a selected location.

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.

Using the EJ Indexes, we see that the indexes for Traffic Proximity and Volume, as well as Superfund proximity have 78th percentile, indicating that there may be issues of EJ concern in this community.



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Vega Baja

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	N/A	N/A	N/A
EJ Index for Ozone	N/A	N/A	N/A
EJ Index for NATA ⁺ Diesel PM	36	N/A	N/A
EJ Index for NATA ⁺ Air Toxics Cancer Risk	40	N/A	N/A
EJ Index for NATA ⁺ Respiratory Hazard Index	39	N/A	N/A
EJ Index for Traffic Proximity and Volume	78	N/A	N/A
EJ Index for Lead Paint Indicator	32	N/A	N/A
EJ Index for Superfund Proximity	78	N/A	N/A
EJ Index for RMP Proximity	41	N/A	N/A
EJ Index for Hazardous Waste Proximity ⁺	44	N/A	N/A
EJ Index for Water Discharger Proximity	48	N/A	N/A