

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. 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 in ECHO. EJSCREEN was used to assess the demographics of the area within a one-mile radius around the facility. Based on the images above, we can conclude that the area surrounding the water treatment plant is rural.

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.

According to EJSCREEN, the area around Matrullas WTP includes a 100% minority population, Demographic Index of 97%, Low Income Population of 93% and Linguistically Isolated Population of 92%.

Sites reporting to EPA

Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0
National Pollutant Discharge Elimination System (NPDES)	0

Selected Variables	Value	State Average	Percentile in State	EPA Region Average	Percentile in EPA Region	USA Average	Percentile 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 ($\mu\text{g}/\text{m}^3$)	0.234	0.761	26	N/A	N/A	N/A	N/A
NATA* Air Toxics Cancer Risk (risk per MM)	28	34	22	N/A	N/A	N/A	N/A
NATA* Respiratory Hazard Index	0.69	1.1	26	N/A	N/A	N/A	N/A
Traffic Proximity and Volume (daily traffic count/distance to road)	0.88	140	9	N/A	N/A	N/A	N/A
Lead Paint Indicator (% pre-1960s housing)	0.0034	0.15	9	N/A	N/A	N/A	N/A
Superfund Proximity (site count/km distance)	0.047	0.15	23	N/A	N/A	N/A	N/A
RMP Proximity (facility count/km distance)	0.099	0.51	11	N/A	N/A	N/A	N/A
Hazardous Waste Proximity (facility count/km distance)*	0.042	0.06	63	N/A	N/A	N/A	N/A
Water Discharger Proximity (count/km)	0.099	0.41	8	N/A	N/A	N/A	N/A
Demographic Indicators							
Demographic Index	97%	86%	91	N/A	N/A	N/A	N/A
Minority Population	100%	99%	100	N/A	N/A	N/A	N/A
Low Income Population	93%	73%	90	N/A	N/A	N/A	N/A
Linguistically Isolated Population	92%	70%	97	N/A	N/A	N/A	N/A
Population with Less Than High School Education	41%	28%	82	N/A	N/A	N/A	N/A
Population under Age 5	6%	6%	53	N/A	N/A	N/A	N/A
Population over Age 64	17%	16%	61	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.

Reviewing the EJ indexes from EJSCREEN, we see that the EJ Indexes for NATA Air Toxics Cancer Risk (89%), NATA Respiratory Hazard Index (85%) and Hazardous Waste Proximity (86%), when compared to the rest of Puerto Rico, exceed the 80th percentile, indicating that these in particular are potential EJ concerns in this community.

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	79	N/A	N/A
EJ Index for NATA* Air Toxics Cancer Risk	89	N/A	N/A
EJ Index for NATA* Respiratory Hazard Index	85	N/A	N/A
EJ Index for Traffic Proximity and Volume	52	N/A	N/A
EJ Index for Lead Paint Indicator	46	N/A	N/A
EJ Index for Superfund Proximity	75	N/A	N/A
EJ Index for RMP Proximity	69	N/A	N/A
EJ Index for Hazardous Waste Proximity*	86	N/A	N/A
EJ Index for Water Discharger Proximity	70	N/A	N/A