

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

Based on a review of demographic and environmental data in EJSCREEN and other sources, the community around the facility is an area with potential EJ concerns.

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)


CWA / NPDES PRASA Permit Renewal.

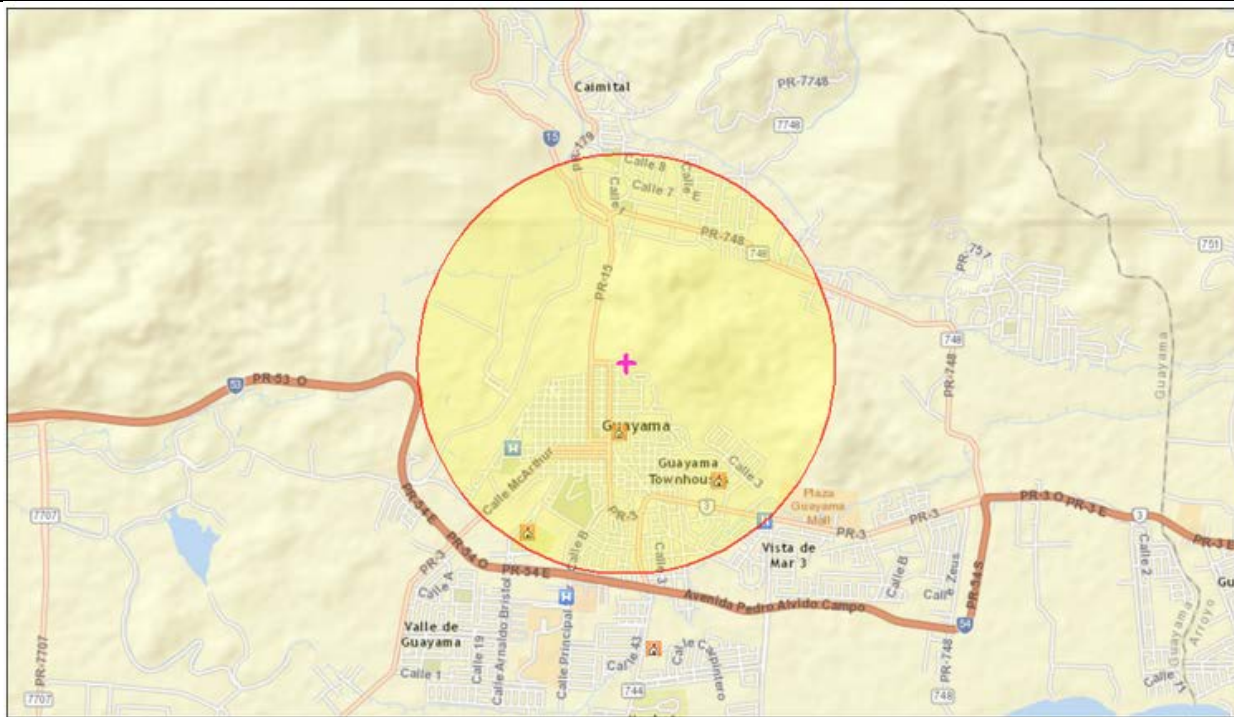
B. Note other types of permits required by EPA statutes (e.g., PSD, NNSR, NPDES, UIC, RCRA, TSCA) that are in place or are being sought for the same facility, and the agency responsible for issuing that permit or identified by the permit applicant (e.g., EPA, state or local agency), as indicated by EPA’s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

N/A.

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

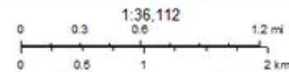
A. Identify area(s) (with maps, if practicable) near the facility that the EJ in Permitting screening process has prioritized for EJ analysis.

Use the Snipping Tool  to capture Map Images, Copy and Paste in space below, table cell will expand to fit map



June 26, 2017

- Buffer Area
- Hospitals
- + Digitized Point
- Schools



Sources: Esri, HERE, DeLorme, USGS, IntraMap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, Esri (Thailand), Swisstopo, IGN, CC, © OpenStreetMap contributors, and the GIS User Community
EPA/CEI, OPA



Map sources: EJSCEEN (upper); ECHO (lower).

B. Explain how the area(s) were identified (e.g., use of EJSCEEN; 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. EJSCEEN 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 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.

Provide a narrative description of the demographics of the area, discussing the topics in Section 4.A. of the instructions. Address such areas as population, age, ethnicity, and income. Use the snipping tool to include relevant tables and maps from other sources, cite all sources.



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 ($\mu\text{g}/\text{m}^3$)	0.151	0.761	11	N/A	N/A	N/A	N/A
NATA* Air Toxics Cancer Risk (risk per MM)	28	34	21	N/A	N/A	N/A	N/A
NATA* Respiratory Hazard Index	0.6	1.1	10	N/A	N/A	N/A	N/A
Traffic Proximity and Volume (daily traffic count/distance to road)	74	140	63	N/A	N/A	N/A	N/A
Lead Paint Indicator (% pre-1960s housing)	0.24	0.15	83	N/A	N/A	N/A	N/A
Superfund Proximity (site count/km distance)	0.22	0.15	86	N/A	N/A	N/A	N/A
RMP Proximity (facility count/km distance)	1.4	0.51	92	N/A	N/A	N/A	N/A
Hazardous Waste Proximity (facility count/km distance)*	0.16	0.06	94	N/A	N/A	N/A	N/A
Water Discharger Proximity (count/km)	0.18	0.41	39	N/A	N/A	N/A	N/A
Demographic Indicators							
Demographic Index	91%	86%	64	N/A	N/A	N/A	N/A
Minority Population	100%	99%	95	N/A	N/A	N/A	N/A
Low Income Population	82%	73%	63	N/A	N/A	N/A	N/A
Linguistically Isolated Population	70%	70%	41	N/A	N/A	N/A	N/A
Population with Less Than High School Education	25%	28%	42	N/A	N/A	N/A	N/A
Population under Age 5	7%	6%	70	N/A	N/A	N/A	N/A
Population over Age 64	18%	16%	67	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 risk 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.

According to EJSCREEN, the area around PRASA Guayama WTP includes a 100% minority population, a low income population of 82%, and a linguistically isolated population of 70%. There are three schools and two hospitals within a one-mile radius of the facility.

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.

Provide a narrative description of the land use of the area, discussing the topics in Section 4.B. of the instructions. Use NEPAssist [Address such areas as industrial uses, waterbodies, protected natural environments, and community usage. Use the snipping tool to include relevant tables and maps from other sources, cite all sources.



Links to Mapping Tools:

<http://ejscreen.epa.gov/mapper/index.html>;

<http://nepassisttool.epa.gov/nepassist/entry.aspx>

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	54	N/A	N/A
EJ Index for NATA* Air Toxics Cancer Risk	59	N/A	N/A
EJ Index for NATA* Respiratory Hazard Index	56	N/A	N/A
EJ Index for Traffic Proximity and Volume	81	N/A	N/A
EJ Index for Lead Paint Indicator	78	N/A	N/A
EJ Index for Superfund Proximity	85	N/A	N/A
EJ Index for RMP Proximity	93	N/A	N/A
EJ Index for Hazardous Waste Proximity*	91	N/A	N/A
EJ Index for Water Discharger Proximity	61	N/A	N/A

Reviewing the EJ indexes from EJSCREEN, we see that Traffic Proximity and Volume (81%), Superfund Proximity (85%), RMP Proximity (93%), and Hazardous Waste Proximity (91%), when compared to the rest of Puerto Rico, exceed the 80th percentile, indicating that these in particular are potential EJ concerns in this community.