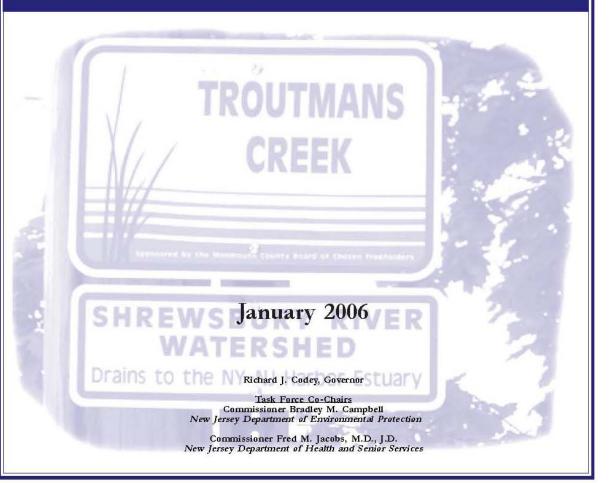
New Jersey Environmental Justice Task Force

Long Branch Action Plan

AN INTER-AGENCY REPORT ON COOPERATIVE STATE ACTION



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A Word from the Environmental Justice Task Force

January 12, 2006

To the Petitioners and All Interested Stakeholders:

The Environmental Justice Task Force is pleased to present the Long Branch Action Plan: An Inter-agency Report on Cooperative State Action, in accordance with New Jersey Executive Order No. 96 and Federal Executive Order 12898, to address potential disproportionate environmental impacts and public health concerns in the Long Branch community.

The Environmental Justice Task Force thanks the Long Branch Concerned Citizens Coalition for its willingness and perseverance in working with the State to address the environmental, public health and community development issues presented in your petition. The Environmental Justice Task Force would also like to thank the New Jersey Department of Environmental Protection's Environmental Justice Program for coordinating the authoring of this report.

This Action Plan serves as an informational platform for both concerned citizens and public servants charged with advocating for and ensuring the protection of public health and the environment in Long Branch. In that the Task Force plays a vital role in developing tangible strategies to address long-standing environmental and/or environmental health concerns, it is our hope that this Action Plan continues to serve as a means to achieving meaningful public participation and tangible actions to address the concerns raised throughout this process.

The Environmental Justice Task Force looks forward to working with the petitioners, community stakeholders, local and county officials, State agencies, local businesses, and the Environmental Justice Advisory Council to implement this Action Plan in Long Branch.

Sincerely,

Commissioner Bradley M. Campbell

Brudly Mr. Carbell

NJ Department of Environmental Protection

Commissioner Fred M. Jacobs, M.D., J.D.

NJ Department of Health and Senior Services

Long Branch Action Plan

An Inter-agency Report on Cooperative State Action

Table of Contents

1.	Introduction	6
II.	Petition Summary	7
III.	History (Abbreviated)	8
a.	Department of Environmental Protection	8
b.	Department of Health and Senior Services	12
IV.	Environmental Justice Task Force (EJTF) Statement of Findings	14
V.	Action Plan	15
a.	Community Participation and Outreach	16
b.	Water, Soil and Sediment Sampling (NJDEP)	17
c.	Indoor Sampling (Monmouth County Health Department)	18
d.	Natural Resources (NJDEP)	18
e.	Health Assessments (NJDHSS)	19
f.	Additional Health Related Activities (NJDHSS)	21
VI.	Timeframes and Milestones	22
VII.	State Contacts	24
VIII.	. Appendices	25
a.	APPENDIX A: Petition	26
b.	APPENDIX B: Map of Long Branch	29
C	APPENDIX C: Site Remediation Definitions	30

The Environmental Justice Task Force would like to acknowledge the considerable efforts of NJDEP's Environmental Justice Program in coordinating and helping to author this report, in addition to agency staff who contributed to this report.

ACKNOWLEDGEMENTS

The Petitioners

Long Branch Concerned Citizens Coalition

Other Community Stakeholders

City of Long Branch, Long Branch Housing Authority, New Jersey Natural Gas, The Long Branch Community Advisory Panel

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I. Introduction

In accordance with the policies set forth in Executive Order No. 96, the New Jersey Environmental Justice Task Force (EJTF) has approved, on January 12, 2006, the following Action Plan to address the concerns raised by the Long Branch Concerned Citizens Coalition (CCC) in the March 6, 2004, petition submitted to the Task Force (See Appendix A). Residents of this neighborhood have expressed environmental protection and public health concerns to New Jersey Department Environmental Protection (NJDEP) and New Jersey Department of Health and Senior Services (NJDHSS) regarding the clean up of the former Manufactured Gas Plant in Long Branch for many years. This Environmental Justice Action Plan (EJAP) was developed by the New Jersey Department of Environmental Protection (NJDEP), as the Task Force lead agency, in collaboration with the CCC, local stakeholders, the New Jersey Department of Health and Senior Services (NJDHSS) and the Environmental Justice Advisory Council (EJAC).

The EJTF recognizes that the petition process has spurred increased awareness of issues by all stakeholders and has provided the community with increased access to information and direct access to the decision-makers in this process. Furthermore, the EJTF recognizes the efforts of the CCC in the collection of 66 signatories and their work to engage citizens as environmental stewards of Troutmans Creek and their community.

According to Executive Order No. 96, Section 8, part d,e:

The Task Force shall develop an Action Plan for each of the selected communities after consultation with the citizens, as well as local and county government as relevant, that will address environmental, social and economic factors that affect their health or environment. The Action Plan shall clearly delineate the steps that will be taken in each of the selected communities to reduce existing environmental burdens and avoid or reduce the imposition of additional environmental burdens through allocation of resources, exercise of regulatory discretion, and development of new standards and protections. The Action Plan, which shall be developed in consultation with the Environmental Justice Advisory Council, will specify community deliverables, a timeframe for implementation, and the justification and availability of financial and other resources to implement the Plan within the statutory and regulatory jurisdiction of the Departments of the State of New Jersey. The Task Force shall present the Action Plan to the relevant Departments, recommending its implementation.

Additionally, the Task Force shall monitor the implementation of each Action Plan in the selected communities, and shall make recommendations to the Departments as necessary to facilitate implementation of the Action Plans. Departments shall implement the strategy to the fullest extent practicable in light of statutory and resource constraints.

II. Petition Summary

The CCC submitted a petition to the New Jersey EJTF on March 6, 2004. The petition area of concern is a mixed residential and commercial area in Long Branch City, Monmouth County, New Jersey, bounded in the North by Atlantic Avenue, West to Liberty Street, South to Broadway Avenue and East to Long Branch Avenue. (See Appendix B).

According to the 2000 Census the population and income demographics indicate that the petition area has twice as many non-white residents as other areas of New Jersey and three times the average number of individuals below poverty level—making it more susceptible to other quality of life stressors, including lack of access to adequate healthcare and nutrition. [See Table 1]

	Ethnicity			Income	
Geographic Level	Black	Hispanic	Non-White	Median HH \$	Individuals below poverty
					below poverty
State Avg.	13.60%	12.5%	27.4%	\$55,136	8.5%
Long Branch City	18.70%	20.7%	32.0%	\$38,651	16.7%
Area of Concern					
*Census Tract 8056	55.3%	28.6%	70.9%	\$20,862	31.2%
Census tract 8055	41.9%	21.5%	56.2%	\$41,598	15.8%

Table 1

The following points were stated in the petition submitted by CCC and signatories:

- The petitioners request immediate action by the EJTF members agencies to identify and clean up all off-site contamination from the NJ Natural Gas (NJNG) Plant site in Long Branch, NJ.
- The petitioners note that there are polycyclic aromatic hydrocarbons (PAHs), and other potentially dangerous chemicals, in portions of Troutmans Creek, as shown by a report issued by Chapin Engineering on behalf of the Edison Wetlands Association. PAHs include approximately 100 different chemicals, some of which may reasonably be expected to be carcinogens.
- Troutmans Creek is used for subsistence fishing and crabbing.
- The community most closely associated with Troutmans Creek is predominately people of color and low income; however, the petitioners express concern for all people who live in the immediate vicinity of the former gas plant site.
- The petitioners request a detailed survey of Troutmans Creek and all other areas surrounding the former gas plant site, for evidence of off-site contamination, including the full length of the Creek as well as the Grant Court Housing Complex.
- The petitioners request that Troutmans Creek, as well as all off-site areas determined to be contaminated, be restored to a condition (i.e., background levels that existed prior to the plant's commencement of operations) in which residents can safely utilize the land and waterways.

- Clean-up should be permanent in nature, not a temporary cap.
- NJNG should be required to pay "natural resource damages" for the areas of contamination.
- The petitioners request that State government establish a Technical Assistance Grant (TAG) program to provide funds for qualified community groups so that they can contract with independent technical advisors, similar to the federal TAG program established through the US Environmental Protection Agency.

III. History (Abbreviated)

The following provides an abbreviated history of the site remediation activities associated with this site. The complete case file may be reviewed by submitting an Open Public Records Act (OPRA) request, found online at: www.nj.gov/dep/opra. Once an OPRA request is processed, the requestor will receive a call to confirm next steps in the process. For questions, about this process, call: NJDEP's Office of the Records Custodian at 609-341-3121.

a. Department of Environmental Protection

New Jersey Natural Gas (NJNG) as the owner of the former manufactured gas plant (MGP) site in Long Branch, has assumed responsibility for remediating the areas of concern, as identified by NJDEP. NJNG has been assessing, investigating, and remediating the former MGP site and surrounding area with oversight by NJDEP since 1983. In November 1991, NJNG executed an Administrative Consent Order (ACO) with NJDEP. Under the ACO, NJDEP provides technical oversight and review of documents to determine that the investigation and remediation of the site is performed in compliance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E.

The former MGP site, former Jerry Morgan Park, former Conrail property, and numerous off-site parcels have already been investigated and remediated while the remediation of additional off-site properties is either complete or nearing completion for parcels owned by the Long Branch Housing Authority and Long Branch Sewerage Authority. In response to inquiries from CCC regarding specific topics and/or areas of concern, this section of the EJAP provides summary information on remedy selection, Troutmans Creek, the Check Mate Daycare Center, the former Jerry Morgan Park, and ground water/ MGP-product contamination. Please refer to the administrative record for the Long Branch Coal Gas site, Program Interest # 012251, for details regarding these topics/areas as well as all other aspects on the remediation of the former MGP site.

NJDEP reviewed potential exposure pathways, along with historical flood data and water table information in its approval of remedies both on and off-site at the former MGP site.

<u>Remedy Selection:</u> As of the issuance of this EJAP, the delineation of MGP-related soil contamination has been completed. Combinations of restricted and unrestricted use remedial actions are being used to remediate the site. For those portions of the site owned by the Long

Branch Housing Authority, NJNG selected a combination of restricted and unrestricted use remedial actions. NJNG obtained property owner consent from the LBHA for any area owned by the LBHA where a restricted use remedial action was selected. The Brownfield and Contaminated Site Remediation Act (Brownfield Act), N.J.S.A. 58:10B-1 et seq. allows the responsible party for remediation of a contaminated site, in this case NJNG, to select from three types of remedial actions to protect human health and the environment. These types of remedial action are:

- unrestricted use (no engineering or institutional controls)
- limited restricted use (requires institutional controls in the form of a deed notice)
- restricted use (requires engineering and institutional controls such as a cap and deed notice)

When an area of concern or an entire site is cleaned up to unrestricted use, no additional monitoring is required. When an area of concern or an entire site is cleaned up to either limited restricted use or restricted use, the NJDEP requires inspection, monitoring, and/or maintenance of the engineering and/or institutional controls associated with these types of remedies. The NJDEP also requires the submission of a biennial certification from the entity in charge of the remediation to ensure that the controls remain intact. Where there are caps or other forms of engineering controls, the certification must also state that these controls continue to remain intact to serve as effective barriers to potential contaminant exposure.

Troutmans Creek: Pursuant to the ACO for the remediation of the former MGP site, NJNG implemented an extensive remedial action in 2000 that included the removal of MGP contaminated sediment, free and residual product, re-channelization of the creek, and the construction of a multi-layered engineered cap system designed to prevent future contamination of surface water and sediment through the discharge of contaminated ground water to the creek.



More recently in 2003-2004, the Department instructed NJNG to

conduct additional investigation/delineation regarding the contamination identified in Troutmans Creek. Once this investigation is completed, remediation of MGP-related sediment contamination will also be performed by the responsible party as warranted based on contaminant levels, the presence/absence of free and residual product, and the results of an ecological risk assessment.

The petitioners expressed concern about the presence of polycyclic aromatic hydrocarbons (PAHs), and other potentially dangerous chemicals, in portions of Troutmans Creek, as shown by a report issued by Chapin Engineering on behalf of the Edison Wetlands Association. PAHs include approximately 100 different chemicals, some of which may reasonably be expected to be carcinogens. It should be noted that not all PAHs may be attributable to the former MGP site. Careful delineation and review of all pertinent data are used to determine the sources of contamination. Hence, the EJTF acknowledge that the petitioner's community-based research, prior to submitting this petition, served as a catalyst for the additional NJDEP testing outlined in the Action Plan portion of this report.

NJNG first tested Troutmans Creek in September 1985. The test results are referenced in the June 6, 1986 Phase II Remedial Investigation Report (Hydrogeological Site Assessment of the Long Branch Coal Gas Plant). NJNG submitted a *Remedial Investigation Work Plan (RIWP) Addendum* in March 2004 that proposed to sample surface water and sediment in Troutmans Creek. The proposed sampling was conducted in March 2004 and the results are documented in the *Supplemental Remedial Investigation Report - Troutmans Creek Area of Interest* dated May 2004. Among the findings, the results confirmed the presence of MGP-related contaminants in Troutmans Creek between Seaview Avenue and Joline Avenue. The NJDEP's comment letter dated July 13, 2004, required NJNG to further investigate and delineate the contamination.

In response, NJNG submitted a *Supplemental RIWP Addendum* dated September 10, 2004, detailing plans to further investigate contaminants in the surface water, shallow and deep sediments within the creek, and the soil along the Troutmans Creek banks. The NJDEP approved the plans on October 14, 2004, and NJNG conducted the sampling between November 2004 and May 2005. The sampling was conducted over this extended timeframe due to harsh weather conditions and difficulties in negotiating access with property owners that live adjacent to the creek.

The supplemental effort involved re-sampling the area between Seaview and Joline avenues to confirm previous findings and to complete the delineation of MGP-related contamination. The area between Joline and Atlantic avenues was also sampled to obtain additional data on the delineation of potential MGP-related contamination. NJNG also collected samples from the portion of Troutmans Creek situated south of the former MGP site and from various reference areas during these sampling events. Soil sampling was conducted along the eastern and western banks of the creek between Seaview and Joline avenues. The soil sampling on the eastern bank expanded on the soil sampling that NJNG previously conducted on the Long Branch Sewerage Authority property and the soil sampling on the western bank addressed concerns regarding potential exposure to the residents. This soil sampling investigated the potential for contamination to have been transported from the creek and deposited along the creek banks as a result of historical flooding. The Department conducted a field audit of NJNG's supplemental field sampling event and provided routine field oversight of both sampling events.

NJNG submitted a *Revised Supplemental Remedial Investigation Report* (RSRIR) dated August 8, 2005, documenting all of its findings from the investigation of Troutmans Creek. The NJDEP issued a comment letter dated November 17, 2005, on the RSRIR that required NJNG to complete an ecological risk assessment and to remove the product and sediment contamination attributable to the former MGP site.

Check Mate Daycare Center: The community expressed concerned about the investigation performed in the vicinity of the daycare as part of the ongoing dialogue that has occurred since the submission of the EJ petition. In response the Department informed CCC that the NJDEP already met with the management of the Check Mate Daycare Center in November 2003 to discuss both the indoor air and soil sampling results associated with the day care facility. At the conclusion of the meeting and during subsequent discussions, the representatives for Check Mate confirmed that they had no concerns or further issues. This confirmation was based on the NJDEP informing the Check Mate's management that 1) the soil sampling conducted on and adjacent to the daycare center property established that contamination from the former MGP site does not extend onto the facility and 2) the indoor air sampling (see below) established that there was no risk of exposure.

The Former Jerry Morgan Park: As specified in the site remediation plans approved by NJDEP, the remediation of the former Jerry Morgan Park involved excavation of the upper two feet of soil followed by the construction of a two-foot thick soil cap. The soil cap consists of a six-inch thick layer of bank-run gravel, overlain by a twelve-inch thick layer of certified clean fill that was then covered with a six-inch thick layer of top soil. A permeable geotextile fabric was placed between the contaminated soil that was not excavated and the bank-run gravel layer of the soil cap. This fabric prevents intermixing of the cap materials with the underlying soil, acts as limited physical barrier, and serves as a visual marker to alert people of the potential for exposure to the underlying contaminated soil should the cap be disturbed in the future. A deed notice will also be recorded to establish an institutional control that requires routine inspection, monitoring, and maintenance of the soil cap to ensure that it remains protective of public health and the environment.

Ground Water and MGP-product: With regard to MGP-product, further delineation is underway in Troutmans Creek and on the former MGP site in the vicinity of the historical operational area. Completion of the delineation efforts and submission of a Ground Water Remedial Investigation Report/Remedial Action Selection Report (RIR/RASR) is scheduled for March 6, 2006. Pursuant to the ACO, NJNG will submit a Ground Water Remedial Action Work Plan 120 calendar days after the NJDEP approves the Ground Water RIR/RASR.

b. Department of Health and Senior Services

NJDHSS developed two health consultations: potential exposures of residents of Seaview Manor and the Check Mate and Second Baptist Church Day Care Centers through vapor intrusion (that is, the movement of volatile compounds from soil and groundwater beneath buildings into a building's indoor air) and a second consultation on cancer incidence, as described below.

Past Health Consultations:

A) Health Consultation (Former) Long Branch Manufactured Gas Plant Site: Public Health Implications of Exposures to Chemicals in Residential Indoor Air (April 8, 2004)

Released April 8, 2004, this Public Health Consultation evaluated indoor air contaminants measured in the Seaview Manor Property, which is adjacent to and partially built on the former Long Branch Manufactured Gas Plant site. A draft of this report was released for public comment on October 9, 2003.

Benzene, toluene, ethylbenzene and xylenes were identified in air in a crawl space on Seaview Manor property in 1994. Additional indoor air samples were taken in 2002 and 2003, when it was recognized that volatile organic chemicals present in soil or groundwater could enter structures built over the contaminated media. This is known as vapor intrusion.

Nineteen Seaview Manor apartments were tested for benzene, toluene, ethylbenzene and xylenes on March 1, 2003; because it was believed that they might have been impacted by prior operations of the manufactured gas plant. The properties were situated on land that was formerly part of the plant property, but not in the actual area where gas manufacturing operations took place. The NJDHSS evaluated the highest levels measured for potential health implications. Based on the sample results, the NJDHSS and ATSDR do not believe that adverse health effects are likely. However, because of weather conditions at the time of sampling (including a recent snow melt and heavy rains that caused flooding in some of the crawlspaces, resulting in more water than typical for winter months) the results may not have represented a "worst case scenario" or maximum current exposures. Therefore, the NJDHSS and ATSDR classified indoor air exposures among residents of the Seaview Manor Property to represent an "Indeterminate Public Health Hazard." Additional sampling of indoor air at Seaview Manor was recommended.

Indoor air at the day care centers was also tested, based on their proximity to the former gas plant site. This Public Health consultation focused on indoor air as the exposure pathway. Levels of benzene, ethylbenzene, toluene and xylenes were below health

comparison values, and were also comparable to or below ambient air levels. Therefore, indoor air at the day care centers represented "No Apparent Public Health Hazard."

B) Health Consultation: Analysis of Cancer Incidence Near the NJ Natural Gas Company/Long Branch Gas Contamination (September 30, 2003)

At the request of concerned citizens living near the former Long Branch Manufactured Gas Plant (MGP) in Long Branch, cancer incidence was separately evaluated for the entire city of Long Branch and the census tract where the facility was located (CT 8056). Total cancer incidence and 13 specific cancer types were evaluated in this investigation. The specific cancers types were selected because they represent cancer groupings that may be more sensitive to the effects of environmental exposure, though not necessarily related to the specific contaminants found at the Long Branch MGP.

Released in September 30, 2003, this investigation evaluated cancer incidence in a population living relatively near to areas contaminated by the Long Branch MGP. Overall, cancer incidence (all cancers combined) was not elevated in Long Branch. However, brain/CNS cancer was elevated in all females citywide. Lung cancer in white females was higher than expected while stomach cancer was generally lower than expected.

In CT 8056, the area of Long Branch that had the highest potential for exposure to benzene and PAHs from the site, excess levels of esophageal cancer in females, lung cancer in males, and all cancers combined in males was found. The incidence of leukemia, a type of cancer linked to benzene exposure, was not higher than expected citywide or in CT 8056. While lung cancer incidence was higher in males living in CT 8056, lung cancer incidence was not higher than expected for females in CT 8056.

This analysis of cancer incidence in the City of Long Branch and CT 8056 provides little evidence that the rate of cancer in the study population has been affected by the potential exposure to MGP contamination. While no further cancer analyses appear to be warranted, the NJDHSS and ATSDR should continue to work with community representatives to determine the most appropriate health education and outreach strategies to inform the general population about environmental issues in the community. Additionally, the results of this Health Consultation will be considered along with an evaluation of the exposure pathways, community health concerns, and other pertinent information in the future public health assessment of the site.

IV. Environmental Justice Task Force (EJTF) Statement of Findings

The EJTF reviewed the Long Branch Petition on May 6, 2004, during its inaugural meeting. The EJTF found that most of the issues raised in the March 6, 2004, petition submitted by CCC fall within the scope of Executive Order No. 96, and appear to be deserving of further action. The EJTF further acknowledges that barriers in communication between State agencies and the community in the past may have precluded meaningful public participation by the community. The proposed actions outlined in this EJAP seek to address the concerns raised in the petition.

As a result of the Petition submitted by the CCC, the EJTF believes that the agencies involved, with Stakeholder assistance, will facilitate meaningful public involvement in this matter. The EJTF also finds that the responsible party, NJNG, has acted in the public's interest by providing access to information, since the mid-1990s, about the site remediation by hosting a Community Advisory Panel, holding open houses and public meetings, and by establishing a public repository for site-related documents, a project web site and a toll-free hotline at 888-638-9924.

The EJTF further found that since 1983 and since the execution of the November 18, 1991 ACO with NJNG, the NJDEP has carried out its regulatory and oversight functions as required by all applicable laws and regulations.

In addition, as a result of the petition submitted under Executive Order No. 96, opportunities for meaningful public involvement have already been, and continue to be implemented through NJDEP's Site Remediation and Waste Management Program's (SRWMP) Office of Community Relations and the Environmental Justice Program, as well as with the NJDHSS Consumer and Environmental Health Services, Hazardous Site Health Evaluation Program.

The EJTF recognizes that some of the issues raised in the EJ Petition fall outside the scope of State law and would require legislative changes, such as enabling increased public notification and participation in the site remediation process and establishing a State-level Technical Assistance Grant (TAG) program. Therefore, the EJTF strongly recommends that appropriate agencies work with the Environmental Justice Advisory Council to identify policy and possible legislative recommendations associated with the issues raised in this Environmental Justice petition that are not addressed in this Environmental Justice Action Plan (EJAP).

V. Action Plan

The Environmental Justice Action Plan (EJAP) presented below effectively addresses the items raised in the March 6, 2004, petition submitted by CCC in six discussion sections including a) Community Participation Outreach, b) Water, Soil & Sediment Sampling, c) Indoor Sampling, d) Natural Resources, e) Health Assessments and f) Additional Health Related Activities.

It is important to emphasize that several of the EJAP components described in this Action Plan have already been implemented or are underway. In addition, further concerns not included in the original Petition were identified by the EJTF through a community dialogue session facilitated by NJDEP, the CCC, and other interested community members on May 27, 2004, and subsequent semimonthly public meetings, attended periodically by NJDEP upon request. Therefore, actions taken and proposed in this EJAP have been modified from the original scope outlined in the CCC's Petition after consultation with the CCC.

The Long Branch CCC met with NJDEP Commissioner Bradley Campbell and the NJDHSS on March 24, 2005, to discuss and agree on the parameters of this EJAP. A draft of the AP was also shared with the New Jersey Environmental Justice Advisory Council.

In order to address community concerns raised in the Long Branch petition related to the cleanup of the properties owned by NJNG or the Long Branch Housing Authority (LBHA), the NJDEP and the NJDHSS, working with CCC, recommend that the following actions be taken:

- Expanded community outreach
- Additional Water, Soil and Sediment Sampling by NJDEP
- Indoor Air Sampling
- Explore implementing community-identified natural resource restoration projects
- Health Assessments
- Provide additional access to healthcare resources

An overview of each recommendation is provided below. These actions related to the investigation and remediation of the site will be conducted in accordance with the Technical Requirements for Site Remediation to ensure that remedies at the site are protective of public health and the environment.

a. Community Participation and Outreach

The EJTF recommends increased outreach with Stakeholders. To the end, the NJDEP has assigned a community relations officer to work in collaboration with the Environmental Justice Program to implement these efforts. Additionally, agency members have been directed to work with CCC and other interested parties to effectively reach citizens with potential environmental justice concerns.

Further outreach and communication commitments include:

- The NJDEP's Office of Community Relations (OCR) and the Environmental Justice Program will host monthly conference calls with CCC and other interested stakeholders. These conference calls will encourage open communication between community members and NJDEP and provide a forum to share and disseminate information about events at the site.
- Stakeholders may also work with NJDEP confidentially, if requested, however due to resource constraints, petitioners and other stakeholders agree to make all efforts to work cooperatively with NJDEP for general information briefings.
- OCR will provide written monthly updates related to the remediation.
- Copies of the EJAP will be sent to all petition signatories, within 30 days of finalizing. The EJAP is also available upon request by submitting an Open Public Records Act (OPRA) request to the Department. Request forms are available online at: www.nj.gov/dep/opra. Once the request is processed, the requestor will receive a call to confirm next steps in the process. For questions, about this process, call: NJDEP's Office of the Records Custodian, 609-341-3121. The EJAP will also be made available on NJDEP's Environmental Justice Program website.
- In addition, monthly updates on the progress of the site remediation of the former Long Branch Former Manufactured Coal Gas site can be found on the NJDEP's Site Remediation and Waste Management Division Office of Community Relations website at: http://www.nj.gov/dep/srp/community/highlights.htm#21314
- NJDEP will host a community dialogue upon request as part of regular CCC or other interested Stakeholder meetings to provide action plan implementation updates.
- NJDEP will provide information and clarify the procedures necessary to report odors.
- NJDEP will conduct fish consumption advisory surveys working with local community volunteers.
- NJDEP's Environmental Justice Program will continue to monitor the actions set forth in this EJAP and participate in communications as needed.
- The SRWMP will provide the results of its sampling efforts in Troutmans Creek, Long Branch Avenue, Seaview Avenue, Ellis Avenue, and Grant Court to the community.
- NJDEP will identify strategies to conduct outreach to a broader set of stakeholders in Long Branch and will implement outreach accordingly.

b. Water, Soil and Sediment Sampling (NJDEP)

This Action Plan presents the Department's findings and contains preliminary recommendations that will be finalized after NJDEP has the opportunity to integrate the data contained in NJNG's RSRIR dated August 8, 2005. In light of the concerns raised in the petition, the Department conducted its own sampling in furtherance of this EJAP. The NJDEP will provide all sample results obtained from the areas described above to the NJDHSS. Results will be evaluated for their potential health risks. Those evaluations will be included in the ongoing public health assessment or consultation, and presented to the public for additional comment and input.

In accordance with Executive Order No. 96 and with the Environmental Justice Task Force's recommendation, NJDEP has allocated \$200,000.00 to conduct the additional soil, surface water and sediment sampling to address concerns raised by the CCC in its petition and in subsequent dialogue.

Long Branch, Seaview, and Ellis Avenues: The Department collected additional off-site soil samples along Long Branch, Seaview, and Ellis Avenues in May 2005. This sampling was conducted in the right-of-way areas and biased towards the homes of concerned citizens that live along Long Branch Avenue and Seaview Avenue (See Appendix B. Sampling Area A), as well as along the western side of the right-of-way for Ellis Avenue across from the site. The sample locations were selected to coincide with the addresses of the people that the CCC provided to the NJDEP and the specific area of Ellis Avenue as identified by the CCC. All analytical results will be evaluated by the NJDEP with regard to the types and concentrations of contamination and potential sources.

<u>Grant Court Property</u>: While the prior delineation sampling satisfies the Department's regulatory requirements for determining the extent of MGP-related contamination on the Grant Court property, pursuant to this Action Plan, NJDEP conducted confirmatory sampling along the original delineation boundary which included segments of the Grant Court in May 2005.

<u>Troutmans Creek</u>: To address the concerns raised in the petition, NJDEP collected surface water, shallow sediment, and deep sediment samples in Troutmans Creek between Atlantic Avenue and Joline Avenue (See Appendix B. Sampling Area B) as well as from Manhassett Creek from December 13-17, 2004. NJDEP issued a report entitled "Troutmans Creek Preliminary Investigation Report" in May 2005. This report presents the Department's findings and contains preliminary conclusions and recommendations that will be finalized after NJDEP has the opportunity to review all of the additional data that will be included in NJNG's report, "RSRIR dated August 8, 2005".

The CCC, based on the advice of its technical consultants, have agreed to defer additional sediment sampling in Troutman's Creek from Seaview to Joline Avenues until after remediation

of this section of the creek is completed. Furthermore, NJDEP and CCC agree that for future testing in Troutmans Creek, the Department may use the balance of the \$200,000.00 already allocated minus the funds spent on the surface water, sediment, and soil sampling already conducted by the NJDEP in response to this EJAP. It should be noted that future costs will depend on the scope of work to which CCC and NJDEP agree after the extent of NJNG's remedial action plans are made available. If necessary, NJDEP may request that additional funds be allocated in furtherance of this EJAP.

For future Troutmans Creek sampling events, NJDEP will split samples; however, the CCC is responsible for paying for the analysis of its samples. NJDEP agrees to mutually decide on sampling locations. In turn, CCC and/or its technical consultants must also agree to similar and appropriate sample collection procedures and to the selection of New Jersey certified labs.

c. Indoor Sampling (Monmouth County Health Department)

The community has expressed concerns relating to basement flooding at residences adjacent to Troutmans Creek, and the potential for the floodwater to be contaminated. The CCC has requested sampling of the floodwater. In light of the concerns, NJDEP has referred this matter to the Monmouth County Health Department. The NJDEP's Environmental Justice Program will work with the County Health Department to facilitate activities related to indoor basement testing. The Monmouth County Health Department has agreed to do indoor water and/or residue sampling in two basements that are closest to the former MGP site. Please note that at this time potential sampling efforts would be limited. If warranted, any future indoor sampling should be conducted based on data from prior testing.

d. Natural Resources (NJDEP)

<u>Ecological Evaluation and Risk Assessment</u>: NJDEP required NJNG to conduct a baseline ecological evaluation as documented in the report dated March 25, 2002 and it showed no impacts based on the data available at the time. However, the recent data contained in the *Revised Supplemental Remedial Investigation Report* (RSRIR) dated August 8, 2005 indicate the need for additional ecological risk assessment in Troutmans Creek. As a result, the NJDEP is requiring NJNG to submit an Ecological Risk Assessment Work Plan in February 2006.

<u>Fish Consumption Advisories:</u> NJDEP and the NJDHSS issue fish consumption advisories for state waters based on contaminants including mercury, polychlorinated biphenyls (PCBs), and dioxins. Separate advice is directed at women of childbearing age and children (high-risk population), and the general population to limit or avoid eating certain types of recreationally caught fish and crabs. Exposure to low levels of these contaminants may have long lasting health effects on people. Statewide advisories for striped bass and bluefish due to PCBs apply to the waters of Troutmans Creek. In addition, the advisory for American eel for the Shrewsbury River would also apply to Troutmans Creek. The public is encouraged to become familiar with

these fish advisories, for more information go to http://www.state.nj.us/dep/dsr/njmainfish.htm or call 1-609-984-6070 for a copy of the advisory booklet.

After meeting with NJDEP, NJDHSS, and the Monmouth County Health Department, CCC requested that fish advisories specific to the locality be issued, instead of the current fish advisories.

New Jersey does not currently issue fish advisories based on polycyclic aromatic hydrocarbons (PAHs), and NJDEP does not normally include PAHs in the routine fish monitoring program conducted in marine, estuarine and fresh waters. Although fish can accumulate PAHs in their tissues, the levels are typically not elevated since fish can rapidly metabolize PAH compounds. It may be appropriate to look for PAH compounds in biota in areas with high concentrations of PAH compounds (e.g., oil spills), or in organisms lower on the food chain in contaminated areas. Bivalves (e.g., clams) and crabs may accumulate PAHs to higher levels, as compared to fish. In these cases, the responsible parties would typically be responsible for sampling and analyzing biological tissues.

NJDEP's Watershed Outreach and Education division will work with community groups, the Monmouth County Health Department, and others to disseminate fish consumption advisory information in Long Branch. If requested, NJDEP's Division of Watershed Outreach and Education is prepared to work with community-based volunteers to survey those people that fish in waters in Long Branch to better understand fishing and fish consumption patterns.

Assessment of Potential Natural Resource Impacts: NJDEP's Site Remediation and Waste Management Program is required to provide all compiled information to NJDEP's Office of Natural Resource Restoration for evaluation. NJNG has voluntarily approached NJDEP regarding its Natural resource damages obligations and the Department will make determinations once all remediation activities are completed.

NJDEP encourages Long Branch residents to submit ideas for environmentally beneficial projects that could be used as possible Natural Resources Damages claims are explored. The CCC and the Long Branch Community Advisory Panel have submitted a list of projects to be considered if the Natural Resources Restoration process is utilized.

Additional information about this process can be found at the NJDEP website at: http://www.nj.gov/dep/nrr/.

e. Health Assessments (NJDHSS)

NJDHSS had been actively involved with CCC for approximately one and a half years prior to the submittal of the petition. In August 2002 the CCC submitted a petition to the federal Agency for Toxic Substances and Disease Registry (ATSDR) requesting an evaluation of health issues

related to the Long Branch (former) MGP Site. The petition was accepted by ATSDR. NJDHSS involvement with the community and the site is a result of a cooperative agreement between ATSDR and NJDHSS.

NJDHSS began meeting with the community through CCC meetings in November 2002, and proposed to develop a series of public health consultations and a public health assessment to address concerns relating to the site. The NJDHSS completed two health consultations and conducted four availability sessions for this site prior to and early in the EJ petition process evaluation, which are described later in this Action Plan.

NJDHSS and ATSDR continue to meet regularly with the CCC. Through these meetings and availability sessions, the health agencies have identified additional community concerns that have been and continue to be addressed through the health assessment process. These concerns include:

- risks from potential exposures to children using the Check Mate and the Second Baptist Church day care centers;
- risks to residents who utilized the former Jerry Morgan Park prior to discovery of contamination and subsequent closing;
- safety of consumption of fish and crabs taken from the Troutmans Creek;
- relationship between the site and cancer in residents;
- relationship between the site and asthma and other respiratory problems in adults and children:
- concerns about frequent headaches and nausea among residents of the Seaview Manor complex;
- concerns about odors in the area and their potential impact on health;
- concerns about the likelihood of psychological stress among residents facing relocation from Seaview Manor;
- the potential health effects from exposure to benzene, toluene, ethylbenzene and xylenes, both individually and as a mixture;
- the frequency of childhood lead poisoning in Long Branch;
- the risk to residents living along Troutmans Creek whose basement are occasionally flooded by the creek.

NJDHSS is currently evaluating past exposures to residents who may have used the former Jerry Morgan Park, particularly as children. This will be incorporated into its Public Health Assessment.

In response to CCC's initial petition to ATSDR to evaluate health risks associated with the site, NJDHSS has completed two health consultations and presented its findings to the community. NJDHSS plans to complete its public health assessment in the Spring of 2006, and a third health consultation on Troutmans Creek later this year (see Section III, History for more information).

The current health assessment will evaluate all exposure pathways for residents living near the former gas plant site from on-site exposures. It will incorporate the earlier health consultations in order to evaluate incremental risks from exposures.

In addition, a Health Consultation is being developed to assess potential public health impacts of exposure of area residents to the off-site portion of Troutmans Creek, including sediment, water, and biota. This will be completed after the data are received from the NJDEP, and is likely to be released in mid-2006.

f. Additional Health Related Activities (NJDHSS)

Availability Sessions: Availability sessions are one-on-one meetings with residents that live or work near a contaminated site, for the purpose of learning about their potential exposures and their health concerns. Four Availability Sessions were held with regard to the former manufactured gas plant site to date. The first two were in March 2003, for the purpose of meeting with residents of Seaview Manor during the preparation of the indoor air health consultation. The third and fourth were held in May 2004 to meet with area residents regarding the public health assessment. Staff regularly attend the twice-monthly meetings of the CCC, and have been invited to participate in the NJNG's Community Advisory Panel, as an observer.

Resources for Residents of Long Branch: NJDHSS developed a brief list of resources for residents (including the local health department, sources for adult and pediatric medical referrals or concerns, and internet resources for specific chemical information). ATSDR's ToxFaqs (fact sheets on chemicals of concern) and general environmental health materials were also distributed.

<u>Stress Concerns:</u> The CCC noted the need to address potential psychological ramifications associated with an involuntary move out of Seaview Manor. The ATSDR has documented this need at other sites. The NJDHSS and ATSDR contacted Monmouth County to advise them of this potential need, and the County then provided a means for residents to access counseling, if needed.

VI. Timeframes and Milestones

Where known, the timeframes for action plans commitments accompany items listed in the report. Many action items are ongoing and appropriate schedules will be determined based on Stakeholder availability. The time frames for many of the EJAP components are dictated by the activities listed throughout this EJ Action Plan and may change due to unforeseen situations; however, every attempt will be made to complete activities in a timely manner. As many timeframes are action dependent, the appropriate timeframes will be determined at a later time. The EJTF agencies will provide written updates at least quarterly regarding the implementation of this Action Plan. Interested stakeholders are encouraged to attend local meetings of the petitioners, which are held the 2nd and 4th Thursday of each month at 5 p.m. at Brookdale Learning Center on Broadway at 3rd avenues in Long Branch. Information about the Long Branch Community Advisory Panel, which meets monthly on the 1st Tuesday, is available by calling: 732-222-9111.

This final document represents a considerable effort by the EJTF agencies and community stakeholders. While developing this Action Plan, the EJTF found that some of the concerns raised by the community are beyond the scope of current State authority, such as State authority in remedy selection. Furthermore, the petitioners noted that due to lack of funding, the petitioners have been unable to secure independent technical assistance to disprove or confirm the protective assumptions of using caps in remedial selection, which the community questioned in this specific case due to possible fluctuating water tables and unique soil characteristics. To begin to address the regulatory and policy gaps encountered while developing this Action Plan, within 90 days of releasing this EJ Action Plan, the Task Force will develop a list of regulatory and policy gaps identified during the Plan development process and seek recommendations from the Environmental Justice Advisory Council on strategies to address such gaps in regulatory authority.

Despite these limitations, EJTF agencies are committed to implementing the actions that are within current authority and that are enumerated in this action plan.

Milestones

In addition to the key milestones listed below NJDEP held several conference calls and meetings with Stakeholders to receive input, including the Concerned Citizens Coalition, and the Long Branch Community Advisory Panel, the Monmouth County Health Department, the City of Long Branch and New Jersey Natural Gas (NJNG).

•	<u>Date</u>	Description of Event
•	March 22, 2004:	In accordance with Executive Order No. 96, NJDEP, on behalf of the Environmental Justice Task Force receives a petition from Long Branch Concerned Citizens Coalition
•	May 27, 2004:	Community Dialogue #1 at the CCC meeting
•	July 14, 2004:	NJDEP staff meet with CCC to discuss outstanding sampling proposal
•	August 19, 2004:	NJDEP's EJ Program attends NJNG Open House in Long Branch at Grant Court
•	November 4, 2004:	NJDEP and NJDHSS attends Long Branch Community Advisory Panel meeting (LB-CAP)
•	December 7, 2004:	NJDHSS attends LB-CAP meeting
•	January 4, 2005:	NJDEP attends LB-CAP meeting
•	February 3, 2005:	NJDHSS attends LB-CAP meeting
•	March 24, 2005:	Commissioner Campbell meets with CCC
		First draft of Action Plan provided to Stakeholders
•	April 5, 2005:	NJDEP attends LB-CAP meeting
•	May 12, 2005:	Community Dialogue #2 at the CCC meeting
•	July 13, 2005:	Meeting with Latino American Association of Monmouth County
•	July 25, 2005:	Comments from CCC and NJNG received on draft Action Plan
•	July 27, 2005:	Community Dialogue #3 at the CCC meeting
•	October 4, 2005:	NJDEP attends LB-CAP
•	October 27, 2005:	Comments received from LB-CAP
•	January 12, 2005	Environmental Justice Task Force approves Long Branch Action Plan

VII. State Contacts

• For more information about this Environmental Justice Action Plan, contact:

NJDEP Environmental Justice Program Jeremee Johnson, Environmental Justice Coordinator

Mail: P.O. Box 402

Trenton, NJ 08625-0402 Telephone: (609) 341-5311 Fax: (609) 984-3962

For more information about the Site Remediation case, contact:

NJDEP Site Remediation and Waste Management Program Office of Community Relations (OCR)

Judy Shaw, Manager Heather Swartz, Community Relations Coordinator

Mail: P.O. Box 413

Trenton, NJ 08625 Telephone: (609) 984-3081

Fax: (609) 292-4401

• For more information about Health Assessments, contact:

New Jersey Department of Health and Senior Services, Consumer and Environmental Health Services

Mail: P.O. Box 369

Trenton, NJ 08625-0369 Telephone: (609) 584-5367

Fax: (609) 588-7599

For more information about Open Public Records Act, or to make a document request, contact NJDEP's Office of the Records Custodian:

Online: http://www.nj.gov/dep/opra

Phone: 609-341-3121

VIII. Appendices

a. APPENDIX A: Petition

Below is an excerpt of the Long Branch Petition submitted by the Long Branch Concerned Citizens Coalition. The full petition can be found on the New Jersey Environmental Justice Task Force website: http://www.nj.gov/ejtaskforce/.



March 6, 2004

Environmental Justice Task Force c/o Brad Campbell, Commissioner NJ Dept. of Environmental Protection 401 East State Street PO Box 402 Trenton, NJ 08625-0402

Re: NJ Natural Gas Plant & Off-site Contamination

Dear Commissioner Campbell and members of the Environmental Justice Task Force;

This letter is being sent to you under authority provided by Governor James McGreevey's Executive Order on Environmental Justice signed February 18, 2004.

We, the undersigned citizens request immediate action by the agencies represented on the Task Force to identify and clean up all off-site contamination from the NJ Natural Gas Plant Site in Long Branch, NJ.

We have strong evidence indicating that portions of Troutmans Creek are heavily contaminated with polycyclic aromatic hydrocarbons (PAHs) and perhaps other dangerous chemicals. Please see attached report from Chapin Engineering and the Edison Wetlands Association.

As you know, PAHs are a family of about 100 different toxic chemicals, which "may reasonably be expected to be carcinogens," according to the US Department of Health and Human services and the Agency for Toxic Substances and Disease Registry (ATSDR). Please see the attached "Tox FAQs for Polycyclic Aromatic Hydrocarbons."

From our personal observations and personal knowledge, we know that Troutmans Creek is used for subsistence fishing and crabbing.

We know from our personal observations and knowledge that the community at risk from the contaminated Creek is predominately people of color and low-income. This is a classic example of environmental injustice. However, we are concerned for all people who may be harmed by the contamination in Troutmans Creek and other off-site areas contaminated by the Gas Plant.

Letter to Environmental Justice Task Fore March 6, 2004 Page 2

As noted above, we have strong scientific evidence that Troutmans Creek has been contaminated, almost certainly by the NJ Natural Gas Plant. However, we have no reason to believe that Troutmans Creek is the only off-site area contaminated by the Plant.

We request a detailed scientific survey of Troutmans Creek and all other areas surrounding the former Gas Plant site, searching for additional evidence of off-site contamination. This area should include Grant Court Housing Complex and the full length Troutmans Creek from the Shrewsbury River to its termination at the Gas Plant. We believe contamination could extend far from the plant and deep into the soils and sediments. This plant operated for 90 years and it is very unlikely that contamination from the plant was confined within the property owned by NJ Natural Gas.

We request a thorough investigation of the areal extent, and depth into the soil, of all contamination that might reasonably be attributed to the operations of this plant. Previous investigations of off-site contamination have been minimal, and scientifically inadequate. Conceivably, contamination could extend for miles in any direction from this Plant.

We want Troutmans Creek restored to a condition, which will allow people to catch and eat fish, crabs and other wildlife from the Creek without the fear they will be endangering their health. We also want the Creek made safe for swimming, boating and other recreational uses that people may choose. In other words we want the Creek completely cleaned up and the wetlands restored. We seek a similar remedy for all other off-site contamination that is identified: A complete cleanup, not a temporary solution like "capping." We do not want our children and future generations to be plagued by the fear of deadly contamination lurking underground or underwater.

In addition to the cost of a thorough cleanup and restoration, we also believe that NJ Natural Gas should be required to pay "natural resource damages" for the harm they have cause to Troutmans Creek, nearby wetlands and any other areas they have contaminated. NJ Natural Gas never had a right to pollute our community with dangerous chemicals.

As this investigation proceeds, we expect that a precautionary approach will be taken to the cleanup. We are keenly aware of the limitations of health risk assessments for mixtures of chemicals, and we insist that cleanup should aim to restore contaminated areas to background levels- meaning, levels that existed before the Natural Gas Plant began operations.

As part of the cleanup of contaminated sites in communities of color and low-income communities, we request that New Jersey State Government establish a "Technical Assistance Grant" (TAG) program to provide funds to qualified community groups so that they can contract with independent technical advisors to interpret and help the community understand technical information about their site.

Letter to Environmental Justice Task Fore March 6, 2004 Page 3

The federal government established a TAG program for Superfund sites in 1986. The Federal Government's description of TAG grants can be found at the EPA website http://www.epa.gov/superfund/tools/tag.

"A Technical Assistance Grant (TAG) provides money for activities that help your community participate in decision making at eligible Superfund sites. An initial grant up to \$50,000 is available to qualified community groups so they can contract with independent technical advisors to interpret and help the community understand technical information about their site."

"Congress made public involvement in decision making an important part of the Superfund process when the program was established by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. Congress wanted to ensure that the people whose lives were affected by abandoned hazardous wastes would have a say in actions to clean them up. Since the first TAG was awarded in 1988, more than \$20 million has been awarded directly to community groups."

We look forward to your positive and immediate response to this urgent request for investigation, remediation, and assistance pursuant to Governor McGreevey's Executive Order on Environmental Justice.

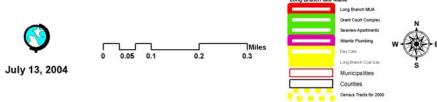
Sincerely,

Long Branch Concerned Citizens Coalition and the concerned residents who have signed this petition.

b. APPENDIX B: Map of Long Branch

Long Branch EJ Petition Area





c. APPENDIX C: Site Remediation Definitions

"Remedial action" means those actions taken at a contaminated site as may be required by the Department, including, without limitation, removal, treatment measures, containment, transportation, securing, or other engineering or institutional controls, whether to an unrestricted use or otherwise, designed to ensure that any discharged contaminant is remediated in compliance with the applicable remediation standards pursuant to N.J.A.C. 7:26E-6.

RESTRICTED USE

"Restricted use standard" means a numeric soil remediation standard which, when achieved, restores the contaminated soil to a condition suitable for only certain specified uses.

"Restricted use remedial action" means any remedial action for soil that requires the continued use of engineering and institutional controls in order to meet the established health risk or environmental standards.

"Limited restricted use remedial action" means any remedial action for soil that requires the continued use of institutional controls but does not require the use of an engineering control in order to meet the established health risk or environmental standards.

■ UNRESTRICTED USE

"Unrestricted use standard" means a numeric soil remediation standard that, when achieved, restores the contaminated soil to a condition or quality suitable for any use. The unrestricted use standard is the lowest of any numeric standard, without limitation, any residential soil remediation standard, any non-residential soil remediation standard and any applicable impact-to-groundwater soil standard.

"Unrestricted use remedial action"

means any remedial action for soil that does not require the continued use of either engineering or institutional controls to meet the established health risk or environmental standards.

For more information on New Jersey's Environmental Justice Program, contact:

NJDEP Environmental Justice Program Phone: 609-341-5311 PO Box 402 Trenton, NJ 08625-0402

- The Environmental Justice Task Force http://www.nj.gov/ejtaskforce/
- The Environmental Justice Program http://www.nj.gov/dep/ej