

Health Consultation

Site Visit Report

QUANTA RESOURCES CORPORATION
(a/k/a QUANTA RESOURCES)

EDGEWATER, BERGEN COUNTY, NEW JERSEY

EPA FACILITY ID: NJD000606442

APRIL 18, 2001

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Agency for Toxic Substances and Disease Registry
Division of Health Assessment and Consultation
Atlanta, Georgia 30333

Health Consultation: A Note of Explanation

An ATSDR health consultation is a verbal or written response from ATSDR to a specific request for information about health risks related to a specific site, a chemical release, or the presence of hazardous material. In order to prevent or mitigate exposures, a consultation may lead to specific actions, such as restricting use of or replacing water supplies; intensifying environmental sampling; restricting site access; or removing the contaminated material.

In addition, consultations may recommend additional public health actions, such as conducting health surveillance activities to evaluate exposure or trends in adverse health outcomes; conducting biological indicators of exposure studies to assess exposure; and providing health education for health care providers and community members. This concludes the health consultation process for this site, unless additional information is obtained by ATSDR which, in the Agency's opinion, indicates a need to revise or append the conclusions previously issued.

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Prepared by:

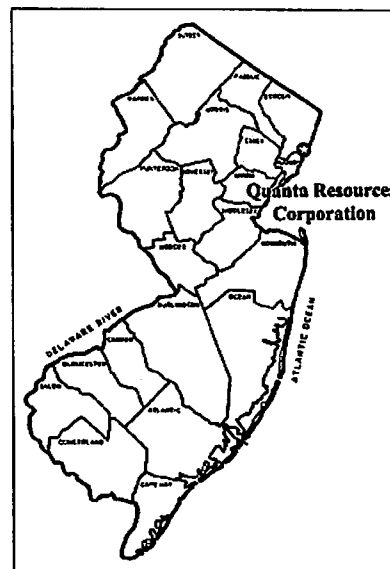
New Jersey Department of Health and Senior Services
Hazardous Site Health Evaluation Program
Consumer and Environmental Health Services
Division of Epidemiology, Environmental and Occupational Health
Under Cooperative Agreement with the
Agency for Toxic Substances and Disease Registry

Statement of Issues

The United States Environmental Protection Agency (USEPA) proposed the addition of the Quanta Resources Corporation (QRC) site, Edgewater, New Jersey, to the National Priority List (NPL) on January 11, 2001. The New Jersey Department of Health and Senior Services (NJDHSS) and the Agency for Toxic Substances and Disease Registry (ATSDR) conducted a visit of the QRC site to perform an initial evaluation of the potential for human exposure pathways associated with the site and to determine whether an immediate public health threat exists.

Site Location

The Quanta Resources Corporation (QRC) site is located at 163 River Road, Edgewater, Bergen County, New Jersey (see inset and Figure 1). The QRC site covers approximately 15 acres and is located in a mixed industrial, commercial, and residential zoned area. The site is bordered to the north by the Celotex Industrial Park (a former gypsum board manufacturing facility), to the east by the Hudson River (approximately opposite West 93rd Street, Manhattan), to the south by the former Spencer Kellog property, and to the west by River Road (a primary commercial thoroughfare). To the immediate west of the site at a distance of approximately 500 yards are the New Jersey Palisades cliffs. The nearest residential area is within 1000 feet of the site. Appendix A contains directions to the QRC site.



Quanta Resources Corporation
N 40° 48' 25"; W 73° 59' 31"

Background

From 1896 through 1974, the QRC site, as well as the southern portion of the Celotex Industrial Park property, was the location of a coal tar processing operation. Between 1974 and 1981, the site was used for the storage and recycling of waste oil. The site had 61 above ground storage tanks (ASTs) with a total capacity of over nine million gallons, an unknown number of underground storage tanks (USTs), and numerous underground pipes. Tanks were used to store coal tar, oil, tar, asphalt, sludge, process water, and other liquids. No containment structures to control runoff, or spills, were reported to be present on the site. According to the New Jersey Department of Environmental Protection (NJDEP), liquid wastes were allegedly discharged to the Hudson River via improperly closed underground piping. On July 2, 1981, the NJDEP halted waste oil recycling activities when it was discovered that the storage tanks contained approximately 266,000 gallons of waste oil having concentrations of polychlorinated biphenyls (PCBs) in the range of 50 - 260 parts per million (ppm). The QRC filed for bankruptcy on October 6, 1981.

As a result of the operations at the QRC site, on-site soils were contaminated with tar materials and oils containing hazardous substances. Under the supervision of the United States Environmental Protection Agency (USEPA), removal action activities were conducted at the QRC site from 1984 through 1988. These activities primarily involved the cleaning and decommissioning of the ASTs and USTs. Additionally, some underground pipes and shallow soils containing coal tar were removed from the site. Figure 2 provides a representation of on-site conditions subsequent to removal action activities.

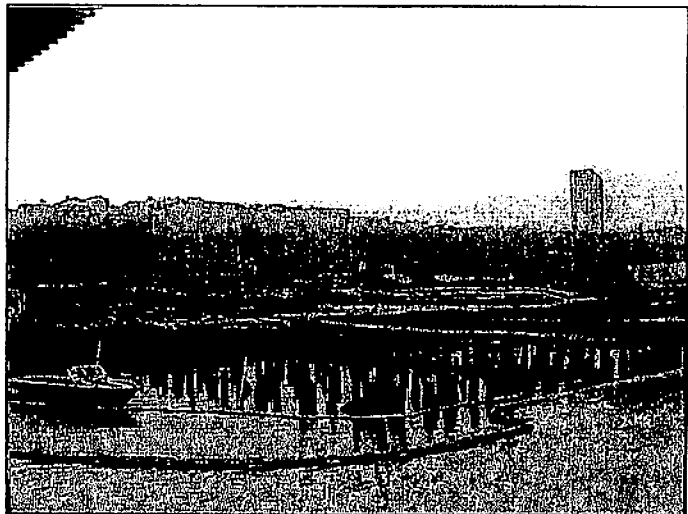
Beginning in 1992, the USEPA assessed removal action activities by collecting on-site soil samples, ground and surface water samples, and sediment samples from the Hudson River. Analytical results indicated elevated concentrations of polycyclic aromatic hydrocarbons (PAHs) and heavy metals. Pursuant to a USEPA Administrative Consent Order, the QRC site owners contracted with GeoSyntec Consultants, Atlanta, Georgia, to conduct a Removal Site Investigation (RSI). The RSI was conducted in 1998 through 1999, and included the collection of surface and subsurface soil samples from the QRC site and surrounding properties, ground water monitoring, and sediment samples from the Hudson River.

Contaminants detected in soil at concentrations significantly above background included arsenic and several PAHs (i.e., benzo(a)anthracene, benzo(a)pyrene, benzo(g,h,i)perylene, benzo(k)fluoranthene, and dibenzo(a,h)anthracene). Delineation of the lateral extent of contamination on the QRC site and within the Hudson River indicated that coal tar, creosote, and other hydrocarbons were present on the site and in sediments extending approximately 750 feet into the Hudson River. In the fall of 1998, the USEPA requested that the Agency for Toxic Substances and Disease Registry (ATSDR) review soil sampling data obtained at the QRC site to determine if a health threat existed to workers performing sub-surface activities at the site. The ATSDR advised that work be conducted by individuals trained in hazardous materials operations, following all requirements of the Occupational Safety and Health Administration's (OSHA) Hazardous Waste and Emergency Response Operations (HAZWOPER) regulation, 29 CFR 1910.120.

Discussion

Observations

On January 19, 2001 representatives of the New Jersey Department of Health and Senior Services (NJDHSS), ATSDR, NJDEP, and USEPA conducted a site visit of the QRC site. Present were James Pasquale, Julie Petix, Sharon Kubiak, Narendra Singh, and Steven Miller, of the



The QRC site, overlooking the Palisades to the west.

NJDHSS. Also present were Thomas Mignone of the ATSDR, Robert Hayton of the NJDEP, and Richard Ho, Robert Montgomery, Andrew Crossland, and Michael Sivak, of the USEPA (Appendix B).

Weather conditions at the time of the inspection were freezing rain with temperatures in the lower 30s. Winds were from the northeast at approximately 15 mph, and the ground was covered with snow and ice.

The site is surrounded by a chain link perimeter fence, although a gate was observed to be open, and a hole in the fence allowed for site access. The site and surrounding area are currently being developed for residential and commercial use. No construction activity was observed the day of the site visit, although it was obvious that construction activities are ongoing. Strong petroleum and sulfur odors were noted.

North of the site is a development referred to as "The Promenade," where approximately 167 units of luxury condominiums and apartments are located on an 800 foot pier extending over the Hudson River. An inactive landfill (construction debris and fill) is located adjacent to The Promenade, and is now covered by paving bricks permitting vehicular access. Multiplex Cinemas is located north of the site. Located immediately east of the site is the Hudson River.

The region of the Hudson River adjacent to the site is tidally influenced, and at the time of the site visit (low tide), areas of a PAH sheen could be observed along the flats. The grade of the site is approximately nine feet above the river. According to the NJDEP, a public access river walk along the banks of the Hudson River is planned as part of future development.



PAH sheen on the Hudson River adjacent to the QRC site.

Potentially Sensitive Populations

Located to the south of the site is the Palisades Child Care Center (115 River Road). The child care center provides day care for children six weeks of age through kindergarten. Licensed for 112 children (five classrooms), the center provides services for 70 to 80 children daily. There is an outside play area adjacent to the child care center. According to the USEPA, the child care center has been advised to keep children indoors on days when odors are strong. Located west of the site are the Waterford Towers, 190 River Road, a 378 unit, two building rental community for active senior citizens. Occupancy is scheduled to begin in March 2001. Located northwest of the site is

Sunrise Assisted Living, located at 351 River Road, a 70 unit assisted living facility which opened in October 2000.

On-Site Hazards

Chemical hazards associated with the QRC site required standard Level D protection, precluding direct contact with contaminated soils. During drier seasons, or at times of soil disturbing activity, use of a respirator may be indicated to limit exposure to contaminated dusts and vapors.

There were no observed or reported biological hazards associated with the site. Similarly, there are no reported radiological hazards associated with the site.

The QRC site does contain physical hazards including sharp metal objects, holes, and debris. In addition, areas of the site near the river's edge are physically unstable.

Exposure Assessment

Based upon preliminary information and observation, potential human exposure routes at the QRC site may include contact with and/or ingestion of contaminated on-site soils. Although air data was not reviewed for this Site Visit Report, general concerns regarding odors at the site may suggest a localized potential pathway, especially during construction activities. Activities associated with the Hudson River (i.e., fishing, boating, ingestion of biota) are not likely to be associated with a pathway directly linked to the QRC site.

Conclusions

1. The USEPA determined that the QRC site contains high levels of PAHs and heavy metals in on-site soils and river sediments, at levels of potential public health concern.
2. The site presents a potential for human exposure pathways associated with contaminated soils and possibly air.
3. There are potentially sensitive populations living or spending time in residential and daycare complexes adjacent to the site.
4. The QRC site does not currently present an immediate public health threat.

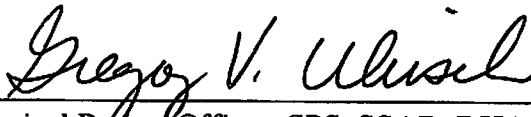
Recommendations

1. Additional exposure assessment is indicated to determine if potential pathways of exposure exist at levels of public health concern.

2. **A Public Health Assessment for the QRC site is indicated to fully evaluate the potential public health implications and community concern issues associated with the QRC site.**

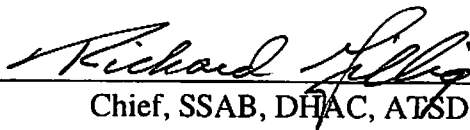
Certification

The Health Consultation for the Quanta Resources Corporation site was prepared by the New Jersey Department of Health and Senior Services under a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR). It is in accordance with approved methodology and procedures existing at the time the health consultation was initiated.



Technical Project Officer, SPS, SSAB, DHAC

The Superfund Site Assessment Branch (SSAB), Division of Health Assessment and Consultation (DHAC), ATSDR, has reviewed this health consultation and concurs with its findings.



Chief, SSAB, DHAC, ATSDR

Information Sources

Mignone, Thomas. ATSDR Regional Information System 2.6 Record of Activity. Quanta Resources. Action Date: 10/13/1998.

NJDEP. Quanta Resources Corporation NPL Proposal Memorandum. Trenton, NJ; September 5, 2000.

Roy F. Weston, Inc. Hazard Ranking System Documentation Package, Quanta Resources, Edgewater, Bergen County, New Jersey. CERCLIS ID No. : NJD000606442. Volume 1 of 1. USEPA Contract No. 68-W7-0026. Work Assignment No.: 053-HRHR-02ZZ. Work Order No.: 20064-053-100-2022. Prepared for USEPA Region II. Edison, NJ; December 2000.

Preparers of Report

Preparers of Report:

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Regional Operations
Office of the Assistant Administrator

ATSDR Technical Officer:

Gregory V. Ulirsch
Technical Project Officer
Superfund Site Assessment Branch
Division of Health Assessment and Consultation

Appendix A

Directions

Quanta Resources Corporation
163 River Road
Edgewater, Bergen County

NJ turnpike North
Exit 18 (signs for George Washington Bridge)
take Route 46 East (Ft. Lee)
take 3rd exit (6th Street/Palisades Park - right side of road, right after you go under the overpass)
make a right at the 2nd stop sign onto Brinkerhoff Ave.
make a right at T in road onto Anderson Street
go through Cliffside Park
make left onto Gorge Road (fork in road)
make right onto River Road
make left into Unilever (R&D business)
make left before the guard house
see a bank sign (former Spencer Kellog property)
Quanta site is directly ahead on right

Appendix B

Contact List

New Jersey Department of Health and Senior Services

James Pasqualo	Project Manager	609-633-2043
Julie Petix	Health Assessor	
Sharon Kubiak	Health Educator	
Narendra P. Singh	Health Assessor	
Steven Miller	Environmental Scientist	

Agency For Toxic Substances and Disease Registry

Thomas Mignone	Regional Representative	732-321-4463; 212-637-4306
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New Jersey Department of Environmental Protection

Robert Hayton	Case Manager	609-633-0744
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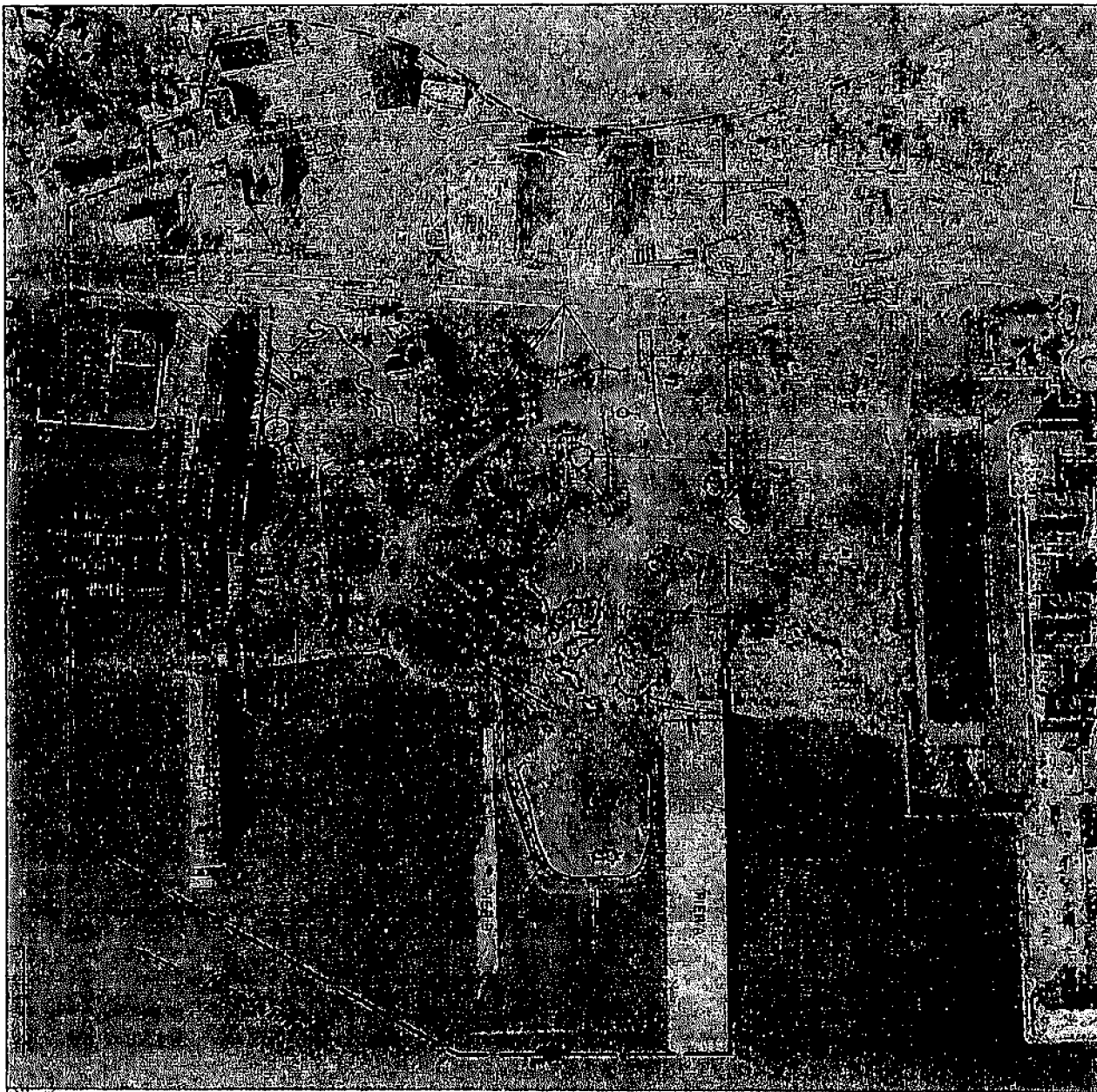
United States Environmental Protection Agency

Richard Ho	Remedial Project Manager	212-637-4372
Robert Montgomery	On-Scene Coordinator	732-906-6934
Andrew Crossland	Geologist	212-637-4436
Michael Sivak	Risk Assessor	212-637-4310

Bergen County Department of Health Services		201-599-6100
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Figure 1 - General site location.



INTERPRETATION CODE	
BOUNDARIES AND LIMITS	
X—X—X	FENCED SITE BOUNDARY
—	UNFENCED SITE BOUNDARY
X X X X X	FENCE
—	STUDY AREA
DRAINAGE	
—	DRAINAGE
→	FLOW DIRECTION
- - - - -	INDETERMINATE DRAINAGE
TRANSPORTATION/UTILITY	
====	VEHICLE ACCESS
+ + + + +	RAILWAY
SITE FEATURES	
	BERMDIKE
≡	STANDING LIQUID
○	EXCAVATION, PIT (EXTENSIVE)
⊖	MOUNDED MATERIAL (EXTENSIVE)
⊖	MOUNDED MATERIAL (SMALL)
CR	CRATES/BOXES
DR	DRUMS
HT	HORIZONTAL TANK
PT	PRESSURE TANK
VT	VERTICAL TANK
CA	CLEARED AREA
DG	DISTURBED GROUND
FL	FILL
IM	IMPONDMENT
LG	LAGOON
OF	OUTFALL
SD	SLUDGE
ST	STAIN
SW	SOLID WASTE

Figure 2 - On-site detail. Adapted from USEPA; *Aerial Photographic Analysis*, March 1999.