ATTACHMENT G

REMEDIAL ACTION SELECTION REPORT

REMEDIAL ACTION SELECTION REPORT BERRY LANE PARK PROJECT MORRIS CANAL, CHROME SITE 121 AND 207 JERSEY CITY, HUDSON COUNTY, NEW JERSEY PROJECT NO. B-080-64

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1.0 INTRODUCTION

This Remedial Action (RA) Selection Report has been prepared for the Jersey City Redevelopment Agency (JCRA) in accordance with the New Jersey Department of Environmental Protection (NJDEP) Technical Requirements for Site Remediation (N.J.A.C. 7:26E). This report addresses the properties as presented below which are (hereinafter referred to as the "Site") which are located entirely in Jersey City, Hudson County, New Jersey.

Address	Block	Lot	Property ID/Name	Property Owner
65 Woodward	2040	D3 and S	Property # 1 (65 Woodward Ave.)	City of Jersey City
Ave.				
948 Garfield Ave.	1948	40	Property # 2 (948 Garfield Ave.)	City of Jersey City
970, 972, 974,	1948	25B, 26,	Property # 3 (City of Jersey City)	City of Jersey City
976, 978, 980 and		28, 29,		
984 Garfield Ave.		31 and		
		32		
958, 960, 964 and	1948	34, 35	Property # 4 (Garfield Junk Yard)	City of Jersey City
966 Garfield Ave.		and 36A	also known as Chromium Site 121	
942, 944 and 946	1948	4B, 25C,	Property # 5 (Hit or Miss) with a	City of Jersey City
Garfield Ave.		41A and	portion also known as Chromium	
		42A	Site 207	
968 Garfield Ave.	1948	33	Property # 6 (MAOK)	City of Jersey City
990 Garfield Ave.	1948	24A	Property # 7 (Purple Fish)	City of Jersey City
1000 Garfield	1948	21D	Property # 8 (1000 Garfield Ave.)	City of Jersey City
Ave.				
75 Woodward	2040	D2	Property # 9 (75 Woodward Ave.)	City of Jersey City
Ave.				
1 Berry Road	2040	EDUP,	Property # 10 (Finch Oil)	City of Jersey City
	and	E1/G1,		
	2057	J1, B, K,		
		H, APL		
		and 16		
125 Woodward	2040	C16 and	Property # 12 (Woodward Metals)	City of Jersey City
Street		C18		· · · ·

The purpose of the remedial action selection report is to select, develop, and implement the most appropriate remedial action for an area of concern. Prior to remedial action, remedial action objectives/goals must be established for the site or area of concern by completion of the following activities:

- Identify all media of concern
- Select applicable remediation standards based on the current and future land use for the site
- Select between active treatment versus containment and exposure controls for each media of concern
- Select among an unrestricted use, limited restricted use or restricted use remedial action for contaminated soil.

A number of investigations have been completed across the various properties, and a significant body of environmental information exists for the Site and surrounding area. Assisted by these investigations a remedial action has been selected.

All media of concern have been identified during the investigations conducted at the Site. Contaminated soil has been identified as a primary concern at the Site. Soil contaminants identified include various Polycyclic Aromatic Hydrocarbons (PAHs) and metals associated with historic fill, and Chromate Chemical Production Waste (CCPW) associated with the historical deposition of contaminated fill within the Morris Canal.

The planned use of the Site for recreational use as a public park has guided the selection of remediation standards. The remedial action selected includes the removal and off-site disposal of contaminated soil within the property boundary and implementation of engineering and institutional controls to address remaining contaminants above the NJDEP's Site Remediation Standards.

The purpose of the Remedial Action Selection Report (RASR) is to demonstrate and document to the NJDEP how the selected remedial action attains the criteria specified in N.J.S.A. 58:10B-12 and 13. To this end, the NJDEP has specified five factors (N.J.A.C. 7:26E-5.1(c)) that should be considered in the selection, development, and implementation of a remedial action as follows:

- Protection of public health and safety and the environment
- Implementability
- Consistency with other applicable laws and regulations
- Potential community impacts
- Potential natural resource injury.

The report is intended to provide information on the remedy-specific and site-specific characteristics to allow NJDEP to evaluate the selected remedial action.

2.0 DESCRIPTION OF THE PROPOSED REMEDIAL ACTION

The proposed remedial action for the Site comprises five (5) principal components as follows:

- Delineation of Vanadium on Chrome Site 121;
- Pre-Remediation Activities;
- Remediation Activities;
- Reuse of soil impacted with historic fill constituents, and
- Engineering Control and Implementation of a Site wide Deed Notice to address reused soils.

3.0 **REMEDIATION STANDARDS**

The applicable soil remediation standards for this Site are the Residential Direct Contact Soil Remediation Standard (RDCSRS), Non-Residential Direct Contact Soil Remediation Standard (NRDCSRS) and the default Impact to Groundwater Soil Screening Levels (IGWSSL). The most stringent (non-residential) chromium soil cleanup criteria of 20 mg/kg for hexavalent chromium, and the most stringent (residential) soil cleanup criteria of 120,000 mg/kg for trivalent chromium were utilized for soil delineation purposes pursuant to the *Chromium Soil Cleanup Criteria* (NJDEP, September 2008 revised April 2010). Laboratory results for groundwater samples collected as part of the remedial investigation were reviewed and compared with the NJDEP's Groundwater Quality Standards (GWQS).

4.0 ANALYSIS OF REMEDIAL ACTION EVALUATION FACTORS

This remedial action has been evaluated according to the five factors set forth in N.J.A.C. 7:26E-5.1(d) as discussed below:

4.1 <u>Protection of Public Health and Safety and the Environment</u>

The protection of public health and safety and the environment relates to the following subcriteria:

- Technical performance and effectiveness
- Reliability
- Reduction of toxicity, mobility, or volume of contaminants
- Minimization of short term and long-term impacts
- Elimination or mitigation of the potential for off-site migration of contamination.

Implementation of the remedial action will manage the potential risk to human health associated with ingestion, inhalation, or dermal contact with contaminated subsurface soil. Recording a Deed Notice will alert present and future property owners of the contamination present at the Site.

Dust control measures as set forth in the Remedial Action Work Plan will be implemented to minimize the risk for exposure to airborne contaminants during Site development. The remedial

action would provide long-term protection of public health and safety and the environment by eliminating exposure pathways for contaminated soils on-site.

4.2 <u>Implementability</u>

Implementation is related to the feasibility and availability of the technologies and to implementation within a reasonable time frame. Soil removal coupled with capping is an established and well-demonstrated remedial technique. Pursuant to the requirements for engineering and institutional controls, the property owner will provide written agreement to the implementation of the engineering and institutional controls.

4.3 <u>Consistency with Other Laws and Regulations</u>

The remedial action is consistent with other Federal, state, and local laws and regulations. Necessary approvals and permits will be acquired prior to implementation.

4.4 <u>Potential Community Impacts</u>

Adverse impacts to the community are short-term in nature and are related to increased traffic (construction vehicles) during soil removal and cap construction. Dust control measures, as set forth in the Remedial Action Work Plan, will be implemented to minimize the risk for exposure to airborne contaminants during Site development. The remedial action is consistent with the local land use Master Plan.

4.5 <u>Potential Natural Resource Injury</u>

Implementation of the proposed remedial action should not result in any natural resource injury. The groundwater remedial action has not been selected at this point.

5.0 CONCLUSIONS

The selected remedial action satisfies evaluation factors set forth by the NJDEP for the following reasons:

- The selected remedial action will practically eliminate long-term health risks.
- Short-term risks can be controlled through implementation of a health and safety plan.
- The potential for impacts to site groundwater from leaching of soil contaminants will be substantially reduced.
- The selected remedial action can be readily implemented in a timely manner.