WHITMAN

Environmental & Engineering Excellence
from Concept to Completion

REMEDIAL ACTION WORKPLAN ADDENDUM
FOR GROUND WATER AT
MONITORING WELL PZ-4

NYSDEC SITE NUMBER: V00186-2

PREPARED FOR

DEXTER CHEMICAL, LLC
845 EDGEWATER ROAD
BRONX, NEW YORK 10474

SUBMITTED TO
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION, REGION 2
LONG ISLAND CITY, NEW YORK

PERFORMED BY
BARRY I. SKOULTCHI P.E. LLC
7 PLEASANT HILL ROAD
CRANBURY, NEW JERSEY 08512
WHITMAN

MARCH 2013

WHITMAN

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7 Pleasant Hill Road
Cranbury, NJ 08512

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March 22, 2013

Nigel N. Crawford, P.E.
New York State Department of Environmental Conservation
47-40 21st Street
Long Island City, NY 11101

RE: Dexter Chemical, LLC
819-845 Edgewater Road
810-842 Whittier Street
Bronx, New York
VCP # V00186-2
Whitman Project #97-09-10

Dear Mr. Crawford:

Enclosed please find one hard copy and two CD copies of Dexter Chemical, LLC's Remedial Action Workplan Addendum for Ground Water at monitoring well, PZ-4

The Workplan Addendum was prepared in response to discussions and recommendations by NYSDEC to mitigate the conditions at this one monitoring well, PZ-4, which was unaffected by Dexter's AS/SVE remediation at "Treatment Area A" of the Dexter site, conducted in 2009 – 2011.

Dexter plans to carry out the proposed bioremediation treatment on April 2, 2013. Necessary approvals and permits have been obtained from USEPA, NYC DOT (as documented in the Workplan Addendum) and NYSDEC. We expect to have a report on the outcome of the proposed treatment at PZ-4 to NYSDEC by June 15, 2013.

If you have any questions or comments, please contact me or Eric Lindhult, P.E. at Whitman.

Very truly yours,

Ira L. Whitman, P.E.
Principal

ILW/dr
Enclosure

cc: Leonard Sitver, Dexter Chemical, LLC
Kenneth Ballan, Dexter Chemical, LLC
Bernard Tivnan, Riverdale Electric Corp.
Richard Conway, Esq., Schenck, Price, Smith & King, LLP
Jane O'Connell, NYSDEC
Rosalie K. Rusinko, Esq., NYSDEC
Gary Litwin, NYSDOH
Dawn Hettrick, NYSDOH
Gary Weissberger, Whitman
Eric Lindhult, P.E.,Whitman
Marlene Lindhardt, Whitman

CERTIFICATION

I, Ira L. Whitman, P.E. certify that I am currently a New York State registered professional engineer and that this Remedial Action Workplan Addendum was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER – 10).

044803
NYS PROFESSIONAL ENGINEER #

March 22, 2013
Date

Signature

REMEDIAL ACTION WORKPLAN ADDENDUM
FOR GROUND WATER AT MONITORING WELL PZ-4

DEXTER CHEMICAL, LLC
BRONX, NEW YORK

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2. NYC DOT Permit
3. EPA Authorization

REMEDIAL ACTION WORKPLAN ADDENDUM
FOR GROUND WATER AT MONITORING WELL PZ-4

DEXTER CHEMICAL, LLC
BRONX, NEW YORK

1.0 INTRODUCTION

Dexter Chemical, LLC (Dexter) is submitting this Remedial Action Workplan Addendum (RAWA) under the December 4, 2003 Voluntary Cleanup Program Agreement (VCA) between Dexter and the New York State Department of Environmental Conservation (NYSDEC).

This work plan addendum supplements the Remedial Action Workplan for Soil and Ground Water at "Area A" and "Area I" submitted in May 2005, and subsequently approved by NYSDEC. The May 2005 workplan presented a scope of work to implement a program of air sparging and soil vapor extraction AS/SVE that was originally recommended in 2003 by NYSDEC. The program was implemented with the AS/SVE treatment system started up in 2009 and operated through March 2012, as documented in quarterly Progress Reports prepared by Whitman on behalf of Dexter.

Performance monitoring by Whitman for soil, ground water and vapors during treatment system operation and subsequent to treatment system shutdown has served to document the treatment performance and attainment of project objectives with an asymptotic behavior in cumulative mass removal and effluent VOC concentrations. The final round of ground water monitoring will be conducted on April 2, 2013.

In conducting the approved Remedial Action Workplan, one monitoring well, (PZ-4), failed to respond to the AS/SVE treatment program implemented at Area A. Consequently, NYSDEC recommended that Dexter conduct a localized in-situ bioremediation in the vicinity of PZ-4, which is on the sidewalk along Edgewater Road, to the east and slightly to the south of the former Dexter Chemical facility.

Figure 1 is a site plan showing Treatment Areas A and I, along with the location of all on-site ground water wells including PZ-4.

This Workplan Addendum presents a scope of work to implement the NYSDEC recommended treatment at PZ-4.

2.0 SUMMARY OF PREVIOUS MONITORING RESULTS FOR PZ-4

The most recent sampling event for PZ-4 was in July 2012 in during the final round of performance monitoring for wells in the vicinity of treatment Area A.

Significant concentrations of volatile organic compounds (VOCs) were detected in the ground water sample collected from this well in July 2012

- Total xylene – 1,110 micorgrams per liter (µg/L);
- Ethylbenzene – 200 µg/L;
- 1,2-dichloropropane – 140 µg/L;
- Toluene – 52 µg/L;
- cis-1,2-dicholroethene – 19 µg/L;
- 1,2-dichlorobenzene – 8.3 µg/L; and
- Benzene – 7.6 µg/L.

PZ-4 was installed in 2001, and has been sampled 12 times beginning on January 22, 2002. Unlike MW-6, located approximately 48 feet north of PZ-4, concentrations of the signature VOCs in PZ-4 have not decreased significantly over the 10-year sampling period. To illustrate, concentrations of signature petroleum compounds in PZ-4 have been measured as follows, during three (3) sampling events.

HISTORIC SAMPLING DATA for PZ-4 in µg/L

	Sampling Date		
Compound	**1/22/02**	**10/28/09**	**7/17/12**
Total xylene	1,500	510	1,110
Ethylbenzene	230	120	200
Benzene	5.5	6.2	7.8

For all practical purposes, concentrations of VOCs in PZ-4 have not diminished despite its proximity to the Treatment of Area A, and the conclusion reached is that water quality in PZ-4 was unaffected by the AS/SVE treatment in Area A.

Compare results for PZ-4 with sampling results at similar times for MW-6, also on the Edgewater Road sidewalk due west of the Dexter facility.

SAMPLING DATA for MW-6 in µg/L

	Sampling Date			
Compound	**1/22/02**	**10/28/09**	**1/27/11**	**7/17/12**
Total xylene	470	150	23	28
Ethylbenzene	88	20	5.4	3.8
Benzene	27	13	6.4	6.4

Concentrations of VOCs in MW-6 resulted in approximately one order of magnitude reductions in 2012 as compared to the pre-treatment period of 2002. Ground water quality in MW-6 has clearly been impacted positively by the AS/SVE treatment that was conducted in Treatment Area A.

Figure 2 is a site map showing historical ground water treatment results for monitoring well PZ-4 throughout the course of the Dexter site investigation, which was initiated 15 years ago in 1998.

3.0 DESCRIPTION OF REMEDIAL ACTION

3.1 Remedial Action Objectives

Dexter has been asked by the NYSDEC to remediate the signature contaminants at PZ-4 in a relatively short period of time (months, not years) to remove a majority, but not necessarily all of the VOC impacts. The primary contaminants (benzene, ethylbenzene and total xylene – BTEX compounds) are petroleum based, which generally are remediated by using in-situ chemical oxidation (ISCO), AS/SVE or bioremediation.

3.2 Conditions at PZ-4 Treatment Area

The following physical, geological, chemical and biological conditions at and near PZ-4 have are major factors on how a remedial action can be designed to attain the Remedial Action Objectives specified in Section 3.1.

- Boring logs indicate the site contains fill and is underlain by a meadow mat (highly organic material) approximately 15 to 19 feet bgs.
- Water is shallow – approximately 6.4 feet below ground surface (bgs) and the well depth is less than 15 feet bgs.
- The well purge records for this well during the July 2012 ground water sampling event indicated no detected dissolved oxygen (DO) and very negative oxidation-reduction potential (ORP) readings from the ground water prior to low flow sampling. These results are generally consistent with historic data.
- Total VOC concentrations in PZ-4 (1,537 µg/l in July 2012) are within the historic total VOC concentration range of 768 to 2,501 µg/l between January 2002 and July 2012.
- Well PZ-4 was outside the zone of influence and sidegradient of the Area A AS/SVE remediation system, which is likely the principal reason that the VOC concentrations have remained "stable" over the years in PZ-4.

3.3 Remedy Selection

Recognizing that the Remedial Action Objectives specify a relatively short time frame and limited geographic extent, Whitman has evaluated the three potential remediation technologies.

3.3.1 AS/SVE

Persistence of VOCs in PZ-4 relate largely to Dexter's inability to gain access to the southern-most portion of Area A as the original AS/SVE system was evaluated and designed. The south end of Area A was inaccessible to AS/SVE installation due both to physical barriers and operational hazards. Ultimately, the physical barriers present prevented the installation of the subsurface piping and infrastructure needed for the AS/SVE subsurface soil and ground water treatment system.

Since the installation of the original AS/SVE system in Area A, ownership and usage of the facility has changed, however the physical barriers remain, rendering AS/SVE as being unfeasible for meeting the PZ-4 Remedial Action Objectives.

3.3.2 In-Situ Chemical Oxidation (ISCO)

The presence of the meadow mat at depth beneath the Dexter site increases the organic content of the ground water, and greatly increases the oxidant demand that must be overcome for both ISCO and bioremediation. The significant but unknown organic demand of the of the

ground water to be treated increases the uncertainties of treatment performance. Consequently, ISCO is the less desirable in-situ remediation technology for the PZ-4 situation.

In addition, ISCO uses strong oxidants that can be hazardous and which present handling concern that may not be suitable for a public sidewalk.

3.3.3 Bioremediation

Whitman proposes bioremediation for well PZ-4, which is located in the sidewalk along Edgewater Road to the south of the Dexter property. Bioremediation of BTEX compounds generally uses oxygen as the electron receptor during the biological destruction of compounds. However, the ORP in the well was approximately -400 mV, with no DO in July 2012, which is generally consistent with historic well purge data and indicates minimal available electron receptors (not uncommon for meadow mat sites). This highly anaerobic environment would require a significant amount of oxgen (electron receptors for respiration) through sparging or injection of additives, such as Oxygen Release Compounds (ORC®), to potentially turn the biogeochemical conditions from anaerobic to aerobic for aerobic bioremediation to occur.

Whitman is proposing to use a bioremediation additive that will degrade the BTEX compounds and other VOCs under the current anaerobic conditions – working with the current biogeochemical conditions and not against them. Therefore, we propose injecting $TPH_{ENHANCED}$© into the subsurface to bioremediate the VOCs under anaerobic conditions. $TPH_{ENHANCED}$© provides an alternative electron receptor that is used by the bacteria when the oxygen has been consumed (respirated). The MSDS for $TPH_{ENHANCED}$© is presented in Attachment 1.

The biological activity and VOC destruction (creation of a concentration gradient) can result in matrix diffusion, where contaminants sorbed on the soil matrix that are not detected by ground water analyses can diffuse into the ground water, resulting in additional mass in the ground water that was not present initially. Although the probable sorbed mass represents more unknowns, additional additives will be injected as a means of compensating for the uncertainty.

The additive will introduce both micro- and macro-nutrients into the subsurface, which will be available for reductive dechlorination of chlorinated VOCs, such as cis-1,2-dichloroethene after the $TPH_{ENHANCED}$© additive is consumed, in case VOCs migrate into the area after the additive is fully utilized. BTEX components that migrate into the area after the

$TPH_{ENHANCED}$© is consumed have the potential to reimpact the PZ-4 area. However, the volume of the selected additive in designed to mitigate this occurrence.

3.4 Implementation of Remedial Action

Injection of the $TPH_{ENHANCED}$© into the subsurface will be performed using a Geoprobe® at the Dexter site. The New York-licensed driller will mix the additives with water to create a slurry mixture, which will then be injected under pressure into the subsurface by the Geoprobe® system. The sidewalk will be repaired with a concrete patch. A NYC sidewalk permit has been obtained which permits the contractor to penetrate the sidewalk and inject the additives. The sidewalk permit is included as Attachment 2.

Due to the limited space available, injection on each side of PZ-4 in the sidewalk is recommended, approximately 10 feet apart (5 feet on either side of PZ-4). We anticipate injecting approximately 300 to 500 pounds of the $TPH_{ENHANCED}$©. The actual recommended quantity will be evaluated, due to the uncertainty caused by the meadow mat. Injecting in a linear pattern sidegradient to PZ-4 will reduce the impact on the contaminants upgradient of the well, and Whitman believes that it will be sufficient to address the majority of the residual VOCs in the immediate area of PZ-4 over the short term.

3.5 Health and Safety

A site-specific Health and Safety Plan was presented to NYSDEC in Dexter Chemical's Remedial Action Workplan of 2005, and the essential elements of that HASP remain relevant. Whitman personnel will review the HASP before being on-site for the implementation of the Remedial Action, and will provide a copy of the HASP to all personnel of the subcontracting firm that will be conducting the borings and the bioremediation additive injections.

3.6 Pre and Post – Remediation Sampling

3.6.1 Pre – Remediation Sampling

Whitman will sample PZ-4 prior to the injection program as a baseline, analyzing ground water for

- VOC
- DO and ORP

- pH and temperature
- Nitrate, sulfate, manganese and iron.

3.6.2 Post – Remediation Sampling

Whitman proposes to conduct two (2) post – remediation ground water sampling events.

- 2 weeks following injections
- 4-6 weeks following injections (depending on results from the 2-week sampling event)

Samples will be collected using appropriate low-flow sampling protocols.

If after two (2) rounds of sampling the ground water concentrations of the target VOCs are significantly reduced, sampling data will be submitted to NYSDEC, the monitoring program will be discontinued and a recommendation will be made to abandon well PZ-4.

4.0 COST ESTIMATE

The estimated cost for the PZ-4 remedial action is summarized as follows:

- **PZ-4 Remedial Action**

- Pre – remediation design		$2,500
- Injection materials		3,200
- Drilling/injection contractor		5,000
- Pre – remediation sampling		1,000
- Post remediation sampling		$3,000
	Subtotal	**$14,700**

- **Reporting, Regulatory Compliance and Project Management**

- Oversight costs with travel		$1,600
- Data review and analysis		2,000
- Reporting and regulatory compliance		4,000
- Project management		$1,800
	Subtotal	**$9,400**
	TOTAL COST	**$24,100**

5.0 SCHEDULE

The remedial action involving injections at Dexter Chemical adjacent to PZ-4 will be conducted according to the following schedule:

	Task	Anticipated Schedule
1.	Design & Planning, Permits, Approvals.	March 4 – March 29, 2013
2.	Pre – Remediation Sampling Drilling and Performing Injections, Sealing of Borings	April 2, 2013
3.	Post – Remediation Sampling	April 16 – May 15
4.	Data Review and Analysis	May 28 – May 31
5.	Reporting	June 3 – June 15

NYSDEC will be notified if any changes to the project schedule occur.

6.0 INSTITUTIONAL CONTROLS

No institutional controls associated with the PZ-4 area remediation are anticipated.

7.0 OPERATION AND MAINTENANCE PLAN/SITE MANAGEMENT PLAN

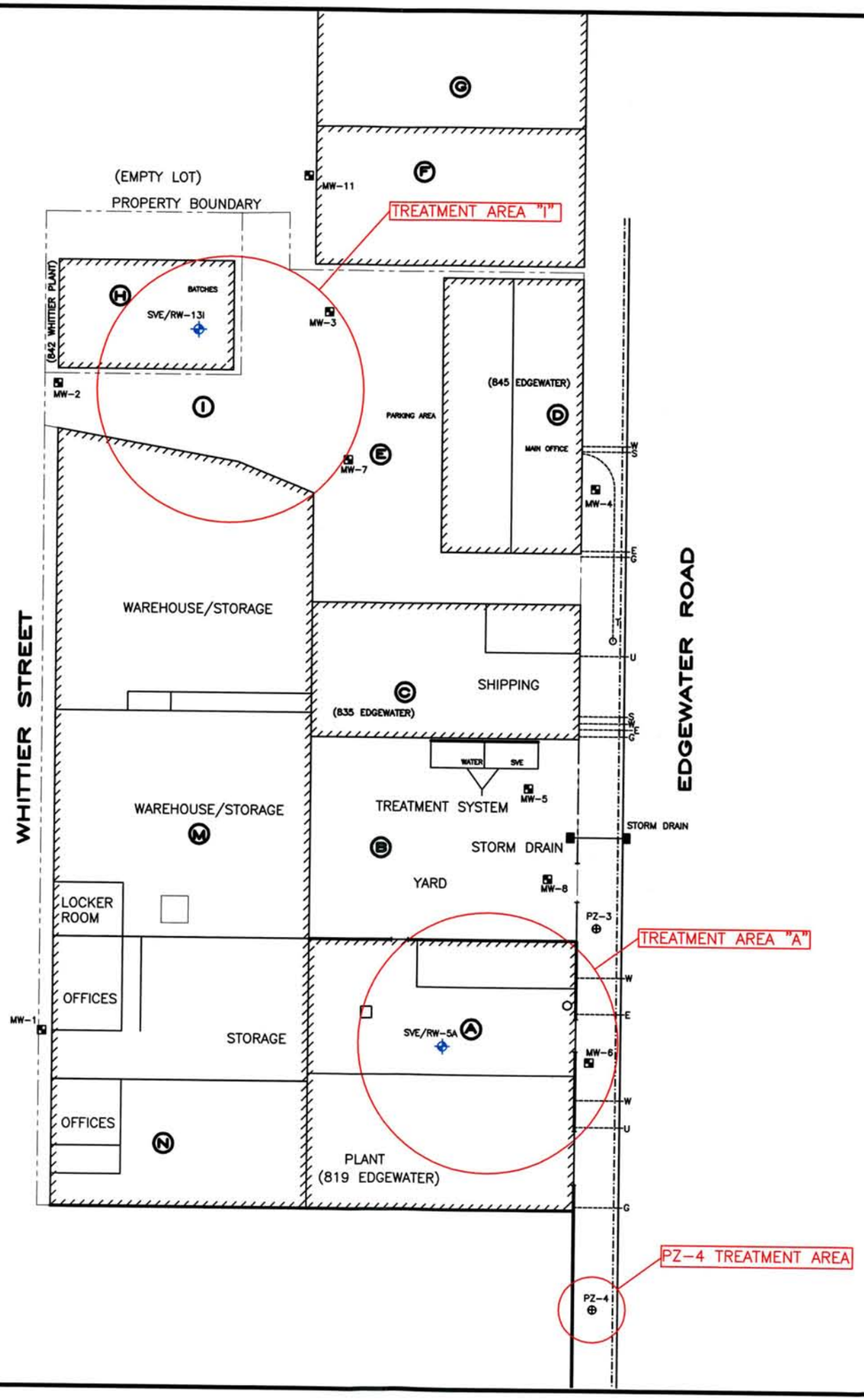
The planned bioremediation of the PZ-4 area will be conducted as a oneshot event on April 2, 2013. On that day, at the conclusion of the injections, the two bore holes drilled will be sealed. Hence, no O&M Plan will be necessary for this action. Likewise, Dexter sees no requirement to modify its approved Site Management Plan in relation to the PZ-4 area remediation.

8.0 PERMITS

A NYC DOT Street Opening Permit for the proposed PZ-4 area remediation has been obtained, and is included as Attachment 2.

Dexter Chemical, LLC has provided USEPA with appropriate notification to its Inventory of Injection Wells under the authority of the Safe Drinking Water Act. EPA has notified Whitman of its verbal authorization to proceed – see Attachment 3.

FIGURES



AREA/BUILDING

- (A) 819 EDGEWATER ROAD
- [B] OPEN YARD
- (C) 835 EDGEWATER ROAD
- (D) 845 EDGEWATER ROAD
- [E] PARKING AREA
- (F) 849 EDGEWATER ROAD
- (G) 855 EDGEWATER ROAD
- (H) 842 WHITTIER STREET
- [I] ROADWAY
- (M) 810 WHITTIER STREET
- (N) 820 WHITTIER STREET

SCALE
0 50'

LEGEND

- (A) – BUILDING IDENTIFICATION TAG
- [B] – AREA IDENTIFICATION TAG
- MW-1 – GROUND WATER MONITORING WELL LOCATION
- SVE/RW-5A – GROUND WATER RECOVERY WELL LOCATION
- ---------- – PROPERTY BOUNDARY

WHITMAN
CERTIFICATE OF AUTHORIZATION No. 24GA28009600

DEXTER CHEMICAL LLC
BRONX, NEW YORK

SITE PLAN

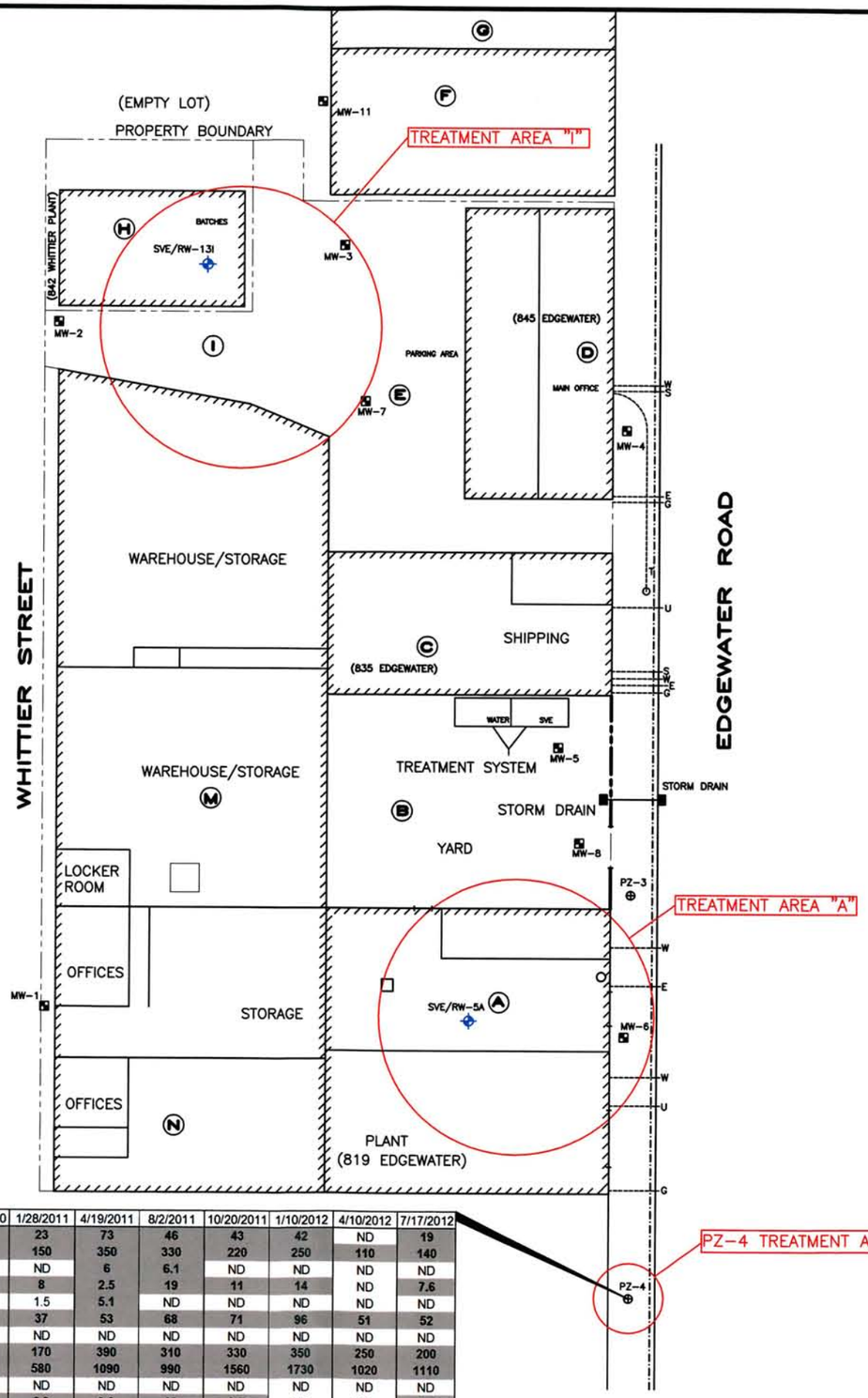
PROJECT MANAGER:	DRAWN BY:	PROJECT NO:
I.W.	C.A.	97-09-10
CHECKED BY: I.W.	DATE: MAR 2013	FIGURE NO: 1

Z:\WHITMAN\1997\97-09-10\MAR 2013\970910 – Fig 1 – Site Plan.dwg

LEGEND

- (A) – BUILDING IDENTIFICATION TAG
- [B] – AREA IDENTIFICATION TAG
- MW–1 – GROUND WATER MONITORING WELL LOCATION
- SVE/RW–5A – GROUND WATER RECOVERY WELL LOCATION
- PROPERTY BOUNDARY

Notes:
All results are in µg/L
Bold - Above NYSDEC Ground Water Standards/Criteria (GWSC)
ND - Not Detected
TCE - Trichloroethene
PCE - Tetrachloroethene



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- (A) 819 EDGEWATER ROAD
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- (M) 810 WHITTIER STREET
- (N) 820 WHITTIER STREET

SCALE
0 50'

PZ-4	1/22/2002	12/3/2002	10/28/2009	4/30/2010	10/27/2010	1/28/2011	4/19/2011	8/2/2011	10/20/2011	1/10/2012	4/10/2012	7/17/2012
Cis 1,2 Dichloroethene	22	38.9	15	28	64	23	73	46	43	42	ND	19
1,2-Dichloropropane	280	290	91	160	350	150	350	330	220	250	110	140
TCE	4	3.8	2.3	ND	ND	ND	6	6.1	ND	ND	ND	ND
Benzene	6.6	9.75	6.2	9.6	18	8	2.5	19	11	14	ND	7.6
PCE	ND	1.98	1.4	ND	ND	1.5	5.1	ND	ND	ND	ND	ND
Toluene	55	58.6	22	34	78	37	53	68	71	96	51	52
Chlorobenzene	ND	ND	0.41	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	230	195	120	210	360	170	390	310	330	350	250	200
Xylene	1500	1280	510	760	1620	580	1090	990	1560	1730	1020	1110
1,4 Dichlorobenzene	ND	0.693	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2 Dichlorobenzene	5.1	4.13	NA	6.6	11	6.9	8.6	13	9.5	ND	ND	8.3

WHITMAN
CERTIFICATE OF AUTHORIZATION No. 24GA28006600

DEXTER CHEMICAL LLC
BRONX, NEW YORK

GROUNDWATER SAMPLING DATA
PZ–4

PROJECT MANAGER:	DRAWN BY:	PROJECT NO:
I.W.	C.A.	97–09–10
CHECKED BY:	DATE:	FIGURE NO:
I.W.	MAR 2013	2

Z:\WHITMAN\1997\97–09–10\MAR 2013\970910 – Fig 2 – Groundwater Sampling Data – PZ–4.dwg

ATTACHMENT 1

MSD FOR BIOSTRYKE $TPH_{ENHANCED}$

New ( ) Repl. ( ) Ltd. ( )_____
M / D / Y

MATERIAL SAFETY DATA SHEET

PRODUCT INFORMATION

Product Identifier **BIOSTRYKE TPH*enhanced***

Manufacturer's Name PLANT PRODUCTS CO. LTD.
Address 314 ORENDA ROAD
BRAMPTON, ONTARIO
L6T 1G1

Emergency Phone Number 1-613-996-6666

Product Use BIOREMEDIAL ADDITIVE FOR PETROLEUM HYDROCARBONS

HAZARDOUS INGREDIENTS

Hazardous Ingredients	C.A.S. / N.A. / UN No.	%	LD_{50}
AMMONIUM NITRATE	CAS 6482-52-2	0-38	4820mg/kg\
POTASSIUM NITRATE	CAS 7757-79-1	0 - 10	ND

WHMIS CLASSIFICATION: MISCELLANEOUS PRODUCTS

PHYSICAL DATA

Physical State:
SOLID

Odour and Appearance:
COARSE WHITE POWDER, SLIGHT AMMONIA ODOUR

Odour Threshold: NA
Vapour Pressure: ND
Evaporation Rate: ND
Freezing Point: NA
pH: ND

Specific Gravity: NA
Vapour Density: ND
Boiling Point: NA
Density: NA

FIRE AND EXPLOSION HAZARD

Flammability: STRONG OXIDIZER. CONTACT WITH OTHER COMBUSTIBLE MATERIALS MAY CAUSE FIRE. EXPLOSIVE IF MIXED WITH ORGANIC MATTER OR FINELY DIVIDED METALS. UNSTABLE UNDER HIGH TEMPERATURE

Means of Extinction:
FLOOD WITH WATER. DO NOT USE CO_2 - DRY CHEMICALS OR FOAM. AMMONIUM NITRATE RELEASES OXIDES WHEN HEATED AND SMOTHERING WILL NOT EXTIGUISH AMMONIUM NITRATE FIRES

Flashpoint: NA **UEL:** NA **LEL:** NA

Auto-ignition Temperature:
ND

TDG Flammability Class:
NON-FLAMMABLE

Hazardous Combustion Products:
AMMONIA, OXIDES OF NITROGEN

ATTACHMENT 2

NYC DOT PERMIT

NYC Department of Transportation

Office of Permit Management

STREET OPENING PERMIT

PERMIT#: X01-2013078-047

ISSUED DATE:	03/19/2013	**PERMIT VALID FROM:**	04/01/2013	**TO:**	04/30/2013
BOROUGH:	BRONX	**PERMIT TYPE:**	0126 - TEST PITS, CORES OR BORING		
FEES (NON-REFUNDABLE):		**ROADWAY TYPE:**			
ADMIN	$135.00	**SIDEWALK TYPE:**	CONCRETE		
TOTAL:	$135.00 PAID				

PERMISSION HEREBY GRANTED TO:

NAME:	ZEBRA ENVIRONMENTAL CORP	**LICENSE #:**	
CONTACT NAME:	FLEISCHMANN PAUL	**CONTRACT #:**	None
PHONE:	(516) 596 - 6300	**SPONSORING AGENCY:**	None
ADDRESS:	30 NORTH PROSPECT AVE LYNBROOK,, NY 11563		

TO OPEN THE SIDEWALK AT:

HOUSE#:	819
ON STREET:	EDGEWATER ROAD
FROM STREET:	DRAKE STREET
TO STREET:	SENECA AVENUE
SPECIFIC LOCATION:	SIDEWALK ONLY SUBMITTED AS:EDGEWATER ROAD DRAKE STREET SENECA AVENUE
FOR PURPOSE OF:	*
FOR MAX. LENGTH OF:	1 FT

INSPECT DIST:	41	**COMM. BOARD:**	02
RECORDED:	None	**WEBTRACKING #:** 201303190155	**SEQUENCE #:** 0001

PERMITTEE SHALL COMPLY WITH ALL APPLICABLE LAWS, RULES AND SPECIFICATIONS OF THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION AND WITH THE TERMS AND CONDITIONS OF THE PERMIT. FAILURE TO COMPLY MAY RESULT IN REVOCATION OF THE PERMIT BY THE COMMISSIONER.

TAMPERING WITH OR KNOWINGLY MAKING A FALSE ENTRY IN OR FALSELY ALTERING THIS PERMIT MAY RESULT IN A RESTRICTION IN OBTAINING FUTURE NYCDOT PERMITS.

NYS LAW

CALL NEW YORK 811, INC. AT 1-800-272-4480 OR 811 BEFORE STREET OPENING EXCAVATIONS. NEW YORK STATE INDUSTRIAL CODE RULE 753 MANDATES 2-10 BUSINESS DAYS NOTICE PRIOR TO DIGGING.

PERMITTEE SHALL COMPLY WITH ALL OF THE FOLLOWING STIPULATIONS

NYC Department of Transportation

Office of Permit Management

STREET OPENING PERMIT

PERMIT#: X01-2013078-047

SPECIFIC STIPULATION	IL
013	MAINTAIN MINIMUM 5 FOOT CLEAR SIDEWALK
019	WORK 7AM - 6PM, MONDAY THROUGH FRIDAY
038	ALL TEMPORARY TRAFFIC CONTROL DEVICES, INCLUDING BUT NOT LIMITED TO SIGNS, CHANNELIZING DEVICES, FENCING AND MARKINGS SHALL BE PROVIDED, INSTALLED, MAINTAINED AND REMOVED BY THE PERMITTEE IN ACCORDANCE WITH THE MOST RECENT VERSION OF PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD). OBTAIN THE MUTCD AT HTTP://MUTCD.FHWA.DOT.GOV .
066	DO NOT PLACE MATERIALS, TRAILERS,CRANES, CONTAINERS, OR EQUIPMENT IN FRONT OF DRIVEWAYS, BUS STOPS, WITHIN FIFTEEN FEET OF A FIRE HYDRANT, IN AUTHORIZED PARKING ZONES OR BLOCKING ACCESS TO DEP WATER TESTING BOXES. IF WORK IS DIRECTLY IN ABOVE AREAS, MAY BE IN VICINITY DURING STIPULATED WORK HOURS BUT NOT WHEN SITE IS UNATTENDED.
091	THIS PERMIT ACTIVITY MAY NOT START UNTIL THE PERMITTEE COORDINATES ALL WORK WITH ANY ONGOING CONSTRUCTION & WITH THE PROJECT/RESIDENT ENGINEER FOR ANY ONGOING CAPITAL PROJECTS.
103	PARKING OF NON-COMMERCIAL VEHICLES ON THE STREET (ROADWAY AND SIDEWALK) WITHIN WORK ZONES IS PROHIBITED.
107	LOADING AND UNLOADING, STANDING OR PARKING IN A LANE ADJACENT TO THE WORK ZONE IN THE ROADWAY IS PROHIBITED. THIS APPLIES TO PERMITTEES AND ALL OF THEIR SUBCONTRACTORS.
NOISE1	BY SUBMITTING THIS APPLICATION AND/OR RENEWAL REQUEST, THE PERMITTEE CERTIFIES ITS COMPLIANCE WITH ALL APPLICABLE CITYWIDE CONSTRUCTION NOISE MITIGATION REQUIREMENTS UNCLUDING, BUT NOT LIMITED TO THE DEVELOPMENT OF A COMPLIANT NOISE MITITGATION OR ALTERNATIVE NOISE MITIGATION PLAN. PLEASE CONTACT THE NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION (WWW.NYC.GOV/DEP)FOR FURTHER INFORMATION
SCHOOL	NO WORK TO BE PERFORMED WITHIN BLOCK FRONTING SCHOOL INCLUDING INTERSECTIONS FOR ONE HOUR PRIOR TO SCHOOL START TIME THROUGH ONE HOUR AFTER END OF SCHOOL TIME. PERMITTEE MUST NOTIFY SCHOOL PRINCIPAL IN WRITING 48 HOURS PRIOR TO BEGINNING ANY WORK. THIS STIP VOIDS ANY/ ALL OTHER CONFLICTING STIPS ON THIS PERMIT UNLESS ACCOMPANIED WITH VARIANCE STIP VAR001.
WAGE01	NYC ADMINISTRATIVE CODE, 19-142, WORKERS ON EXCAVATIONS: A PERSON TO WHOM A PERMIT MAY BE ISSUED, TO USE OR OPEN A STREET, SHALL BE REQUIRED, BEFORE SUCH PERMIT MAY BE ISSUED, TO AGREE THAT NONE BUT COMPETENT WORKERS, SKILLED IN THE WORK REQUIRED OF THEM, SHALL BE EMPLOYED THEREON, (CONT. ON STIP WAGE02)
WAGE02	...AND THAT THE PREVAILING SCALE OF UNION WAGES SHALL BE THE PREVAILING WAGE FOR SIMILAR TITLES AS ESTABLISHED BY THE FISCAL OFFICER PURSUANT TO SEC. TWO HUNDRED TWENTY OF THE LABOR LAW, PAID TO THOSE SO EMPLOYED.

ATTACHMENT 3

EPA AUTHORIZATION TO PROCEED UNDER SAFE DRINKING WATER ACT

Ira Whitman

From: Eric Lindhult [ELindhult@whitmanco.com]

Sent: Thursday, March 21, 2013 11:25 AM

To: kim.lisa@epa.gov

Cc: Ira Whitman <IWhitman@whitmanco.com> (IWhitman@whitmanco.com); Jane O'Connell <jhoconne@gw.dec.state.ny.us> (jhoconne@gw.dec.state.ny.us); 'Crawford, Nigel'

Subject: Verbal Authorization for Injection Wells at Dexter Chemical

Lisa,

I received your voice mail this morning with your verbal authorization to proceed with the proposed injection of bioremediation additives at the Dexter Chemical site in The Bronx, and that we do not need to wait for the formal letter of approval. I appreciate your prompt review and approval of our request.

Eric

Eric C. Lindhult, P.E.
Senior Project Manager

WHITMAN

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