

ENVIRONMENTAL & GEOTECHNICAL SERVICES, LLC

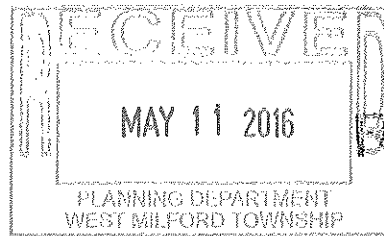
INNOVATIVE

COMPREHENSIVE

SOLUTIONS

May 5, 2016

Antoinette Battaglia
West Milford Township Clerk
1480 Union Valley Road
West Milford, NJ 07480



PLAN
HEALTH

RECEIVED
MAY 06 2016
TOWNSHIP CLERK
TWP. OF WEST MILFORD

file

Re: CEA/WRA Fact Sheet Form
Service Concrete, Corp. aka Dunbar Concrete Products, Corp.
NJDEP PI #294177
173 Oak Ridge Road
West Milford Passaic County, NJ 07480
Block 15901, Lots 5 and 13

Dear Ms. Battaglia:

This letter is to meet the public notification requirement for the establishment of a groundwater Classification Exemption Area submitted to the NJDEP on behalf of our client, Service Concrete Corp. /Oak Ridge Associates, LLC.

Results of recent groundwater samples collected at the Site indicate concentrations of lead, tetrachloroethylene (PCE), volatile organic tentatively identified compounds (VO TICs) and semi-volatile organic tentatively identified compounds (SVO TICs) that are above the applicable New Jersey Department of Environmental Protection (NJDEP) Ground Water Quality Standards. Details are provided on the attached form.

For any questions, please contact the undersigned at malcala@eandgservices.com or (973) 808-6600.

Sincerely,

Moses Alcala, P.G., LSRP
President

cc: Robert Bossart, Service Concrete Corp.

Attachments:

- CEA/WRA Fact Sheet
 - Site Location Map
 - CEA Site Map
 - CEA Calculations



New Jersey Department of Environmental Protection
Site Remediation Program

CLASSIFICATION EXCEPTION AREA / WELL RESTRICTION
AREA (CEA/WRA) FACT SHEET FORM

Date Stamp
(For Department use only)

SECTION A. SITE INFORMATION

Site Name: Service Concrete Corp. aka Dunbar Concrete Products, Oak Ridge Industrial Establishment

Program Interest (PI) Number(s): 294177

Case Tracking Number(s) for this submission: E20060304 through E20060309

This form must be attached to the Cover / Certification Form
if not submitted through the RIR Online Service

1. Indicate the reason for submission of this form (see Instructions):

- ☒ New CEA ☐ Revise CEA ☐ Reestablish CEA ☐ Existing CEA with no changes
☐ CEA for historic fill ☐ CEA lift/removal

If you are submitting this form for an existing CEA provide the CEA Subject Item ID: _____

2. Indicate the type of ground water Remedial Action (RA):

- ☐ Natural ☐ Active ☒ Final RA not yet selected

3. Is this form being submitted with a Remedial Action Permit (RAP) Form (for Soil or Ground Water)? ... ☐ Yes ☒ No

SECTION B. CEA COMPONENT INFORMATION

1. Contaminant(s): This CEA/WRA applies only to contaminants above applicable numeric values established by the Ground Water Quality Standards (GWQS), N.J.A.C. 7:9C, listed in the table below. Except for historic fill CEAs based on assumed ground water contamination, list the maximum contaminant value for all ground water data that could be representative of current conditions and is for any well or sampling point used to establish the CEA. The values listed below may or may not be appropriate for use in evaluating plume fate and transport. See form instructions.

Contaminant	Concentration ⁽¹⁾	GWQS ⁽²⁾	SWQS ⁽³⁾	GWSL ⁽⁴⁾
Tetrachloroethylene	7.6	1	0.34	31
Volatile Organic TICs	561	N/A	N/A	N/A
Semi-Volatile Organic TICs	1,237	N/A	N/A	N/A
Lead	6.2	5	5	N/A

Notes: ⁽¹⁾ Maximum concentration in Micrograms Per Liter

⁽²⁾ New Jersey Ground Water Quality Standards, N.J.A.C. 7:9C

⁽³⁾ Surface Water Quality Standards, N.J.A.C. 7:9B - Applicable only where contaminants in the CEA may discharge to a surface water body.

⁽⁴⁾ Current NJDEP Vapor Intrusion Ground Water Screening Levels available at
<http://www.nj.gov/dep/srp/guidance/vaporintrusion/>

☐ Check if attaching an Addendum to list additional contaminants and associated information.

2. CEA Boundaries: Year of tax map used: 1986

For CEA revisions: ☐ check if CEA Boundary has changed (See Instructions)

☐ check if Block and Lot numbers have changed (See Instructions)

List the Block(s) and Lot(s) included in the areal extent of the Classification Exception Area:

Block(s)	Lot(s)	Check if off-site	Block(s)	Lot(s)	Check if off-site
15901	5	☐			☐
15901	13	☐			☐
		☐			☐
		☐			☐
		☐			☐

☐ Check if attaching an Addendum to list additional Blocks/Lots and associated information:

Narrative description of proposed CEA:

There are 2 proposed CEAs. One is located on Lot 5, associated with AOC-3 (a pair of septic tanks). The COC for this CEA is lead. The CEA occurs in perched water and its extent is limited to a small area of maximum 15' x 20' around the septic tanks (within gravel fill), with a depth of 10'. No water table occurs in the dense silt/clay of glacial till around & below the septic tanks.

The 2nd CEA is located on Lot 13, associated with AOC-4 (another pair of septic tanks). The COCs for this CEA are PCE, volatile organic TICs, and semi-volatile organic TICs. The CEA occurs in shallow overburden water table aquifer with an area of approx. 80 ft long x 40 ft wide. The CEA is vertically delineated by impermeable to low-permeability silts/clays of glacial till at around 15 ft.

Name(s) of the affected Geologic Formation(s)/Unit(s): Glacial till (overburden) over Cornwall Shale Fm.

Direction of ground water flow: Southeast (If multiple water bearing zones exist within the CEA and/or there is no predominant flow direction, see instructions.)

Ground Water Classification: Class II-A (See instructions and GWQS for classification area information.)

Vertical Depth of CEA: 10 ft (AOC3) (ft bgs) and 815 ft (AOC3) (msl).

Horizontal Extent of CEA: 300 (AOC3) Indicate units: ☐ acres or ☒ square feet

For AOC4: vertical= 17 ft b.g. (770' above MSL), area=3200 sq. ft.

3. Projected Term of CEA: (Based on modeling/calculations in the fate and transport description)

Proposed Duration in Years: 4.3 Anticipated Expiration Date: 10/09/2019

or ☒ Indeterminate (Review instructions before selecting "Indeterminate.")

Indeterminate duration for lead CEA at AOC3

4. ATTACH AND/OR SUBMIT THE FOLLOWING: (see instructions for additional information)

Exhibit A: Site Location Maps – USGS Quadrangle Map;

Exhibit B: CEA Map and Cross Section Figure – See N.J.A.C. 7:26C- 7.3(c)1 and 2 and instructions regarding what to include on the map and the cross-section figure.

Exhibit C: GIS Deliverables – CEA Boundary Extent Map. The CEA Boundary Extent Map shall be submitted via email to srggis_cea@dep.nj.gov. See the instructions for detailed GIS deliverable requirements.

For revisions, does the attached map differ from the CEA map on NJ-GeoWeb? ☐ Yes ☐ No ☐ N/A

If "Yes or N/A," identify the format of the CEA Boundary Extent Map: ☐ Shape File ☐ CAD File

SECTION C. CURRENT GROUND WATER USE DOCUMENTATION

1. Indicate the year of the most recent well search completed per N.J.A.C. 7:26E-1.14: 2016

2. If this Fact Sheet form is for a revised CEA or an existing CEA with no changes, have new wells been installed since the CEA was established? ☐ Yes ☐ No ☒ N/A

3. Are there any pumping wells (e.g., potable, industrial, irrigation or recovery wells) within the foot print of the CEA? ☐ Yes ☒ No

SECTION D. WELL RESTRICTION INFORMATION

Certain well restrictions relevant to potable ground water use, such as "Double Case Wells", "Sample Potable Wells", and "Evaluate Production Wells", are consistently set within the boundaries of all CEAs established by the NJDEP in Class I and II-A areas (see *instructions*).

1. Are there any other site-specific well restrictions relevant to potable ground water use that should be set within or near the boundaries of the proposed CEA? ☐ Yes ☒ No

If "Yes", describe below any such site-specific well restrictions proposed for this CEA:

SECTION E. PUBLIC NOTIFICATION REQUIREMENTS

See form *instructions* for notification procedures

1. Indicate which of the following entities have been notified pursuant to N.J.A.C. 7:26C-7.3(d). (check all that apply)

- ☒ Municipal and county clerk(s)
- ☒ Local, county or regional health department(s)
- ☒ Designated County Environmental Health Act agency (if applicable)
- ☒ County Planning Board
- ☐ Pinelands Commission (if applicable)
- ☒ Owners of real property overlying CEA foot print

2. List of Names and Addresses – List below and/or in an attachment, the names/addresses of all persons notified pursuant to N.J.A.C. 7:26C-7.3(d) based on the proposed CEA boundaries. If the site property owner differs from the person responsible for conducting the remediation, enter the site owner's name and address first in below table. See instructions for more information regarding address list and indicating if vapor intrusion was evaluated for properties over the CEA.

☐ Check here if no volatile contaminants are in the CEA

Entity or Owner Name	Notification Address Used (Include applicable block and lot overlying CEA if owner address differs from property address)	Date notification sent	Was property evaluated for vapor intrusion? Check if "Yes"
Passaic County Department of Health	18 Clark Street, Paterson, NJ 07505	05/04/2016	☐
Township of West Milford Department of Health	1480 Union Valley Road, West Milford, NJ 07480	05/04/2016	☐
Passaic County Clerk	401 Grand Street, Paterson, NJ 07505	05/04/2016	☐
Township of West Milford Clerk	1480 Union Valley Road, West Milford, NJ 07480	05/04/2016	☐
Passaic County Planning Board	930 Riverview Drive, Suite 250, Totowa, NJ 07512	05/04/2016	☐
Amalgamated Mud Corp./FXA Service Concrete Corp.	37 Morningstar Drive, Sparta, NJ 07871	05/04/2016	☐
			☐
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			☐
			☐
			☐
			☐

ADDENDUM

Classification Exception Area / Well Restriction Area Fact Sheet Form

Section B. CEA Component Information

1. Contaminant(s): This CEA/WRA applies only to contaminants above applicable numeric values established by the GWQS, N.J.A.C. 7:9C, listed in the table below. Except for historic fill CEAs based on assumed ground water contamination, list below the maximum contaminant value for all ground water data that could be representative of current conditions using any well or sampling point used to establish the CEA. The values listed below may or may not be appropriate for use in evaluating plume fate and transport. See form Instructions.

[illegible]

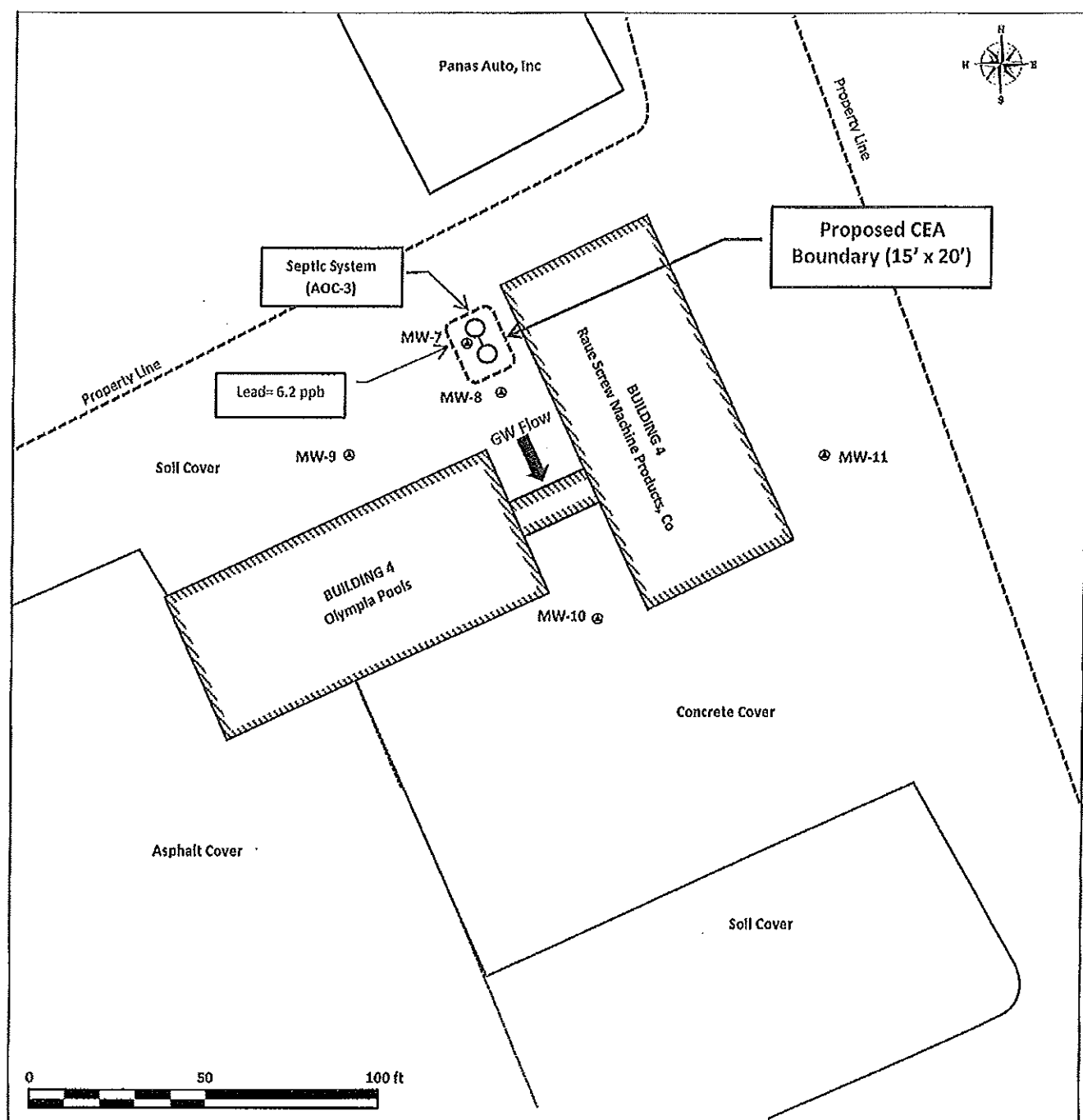
Notes: (1) Maximum concentration in Micrograms Per Liter
(2) New Jersey Ground Water Quality Standards, N.J.A.C. 7:9C
(3) Surface Water Quality Standards, N.J.A.C. 7:9B - Applicable only where contaminants in the CEA may discharge to a surface water body.
(4) Current NJDEP Vapor Intrusion Ground Water Screening Levels

2. CEA Boundaries:

Blocks(s) and Lot(s) included in the areal extent of the Classification Exception Area:

Year of tax map used: _____ For CEA revisions, check here if Block and Lot numbers have changed: ☐

[illegible]



Environmental & Geotechnical Services, LLC

301 Fairfield Road
Fairfield, New Jersey 07004

CEA Map 1

PI #294177

SERVICE CONCRETE (Blk 15901, Lot 5)
173 Oakridge Rd, W. Milford, NJ

Created By

Date Created

Reviewed By

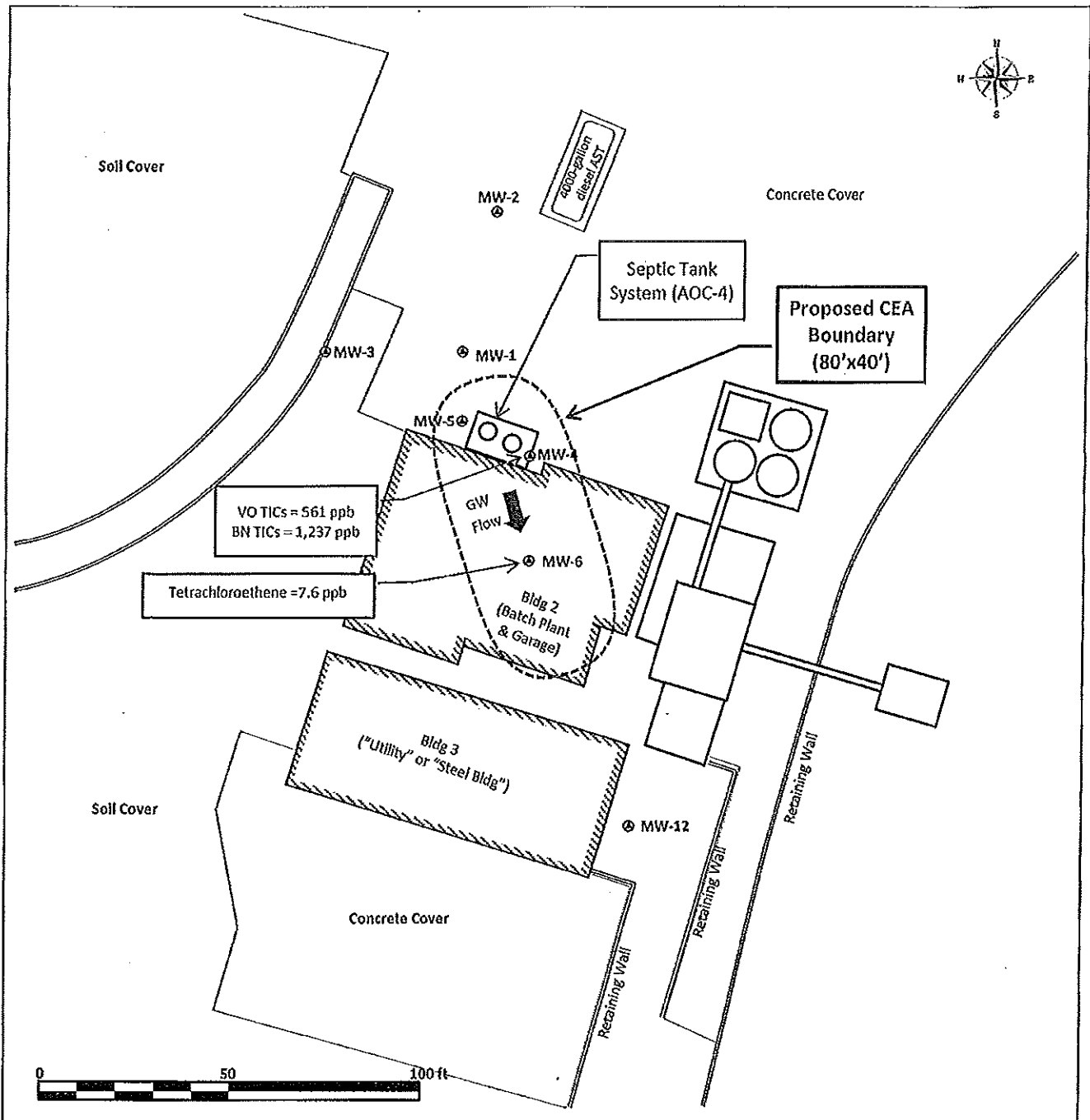
Date Reviewed

C. Crum

4/11/2016

M. Alcala

4/11/2016



Environmental & Geotechnical Services, LLC

301 Fairfield Road
Fairfield, New Jersey 07004

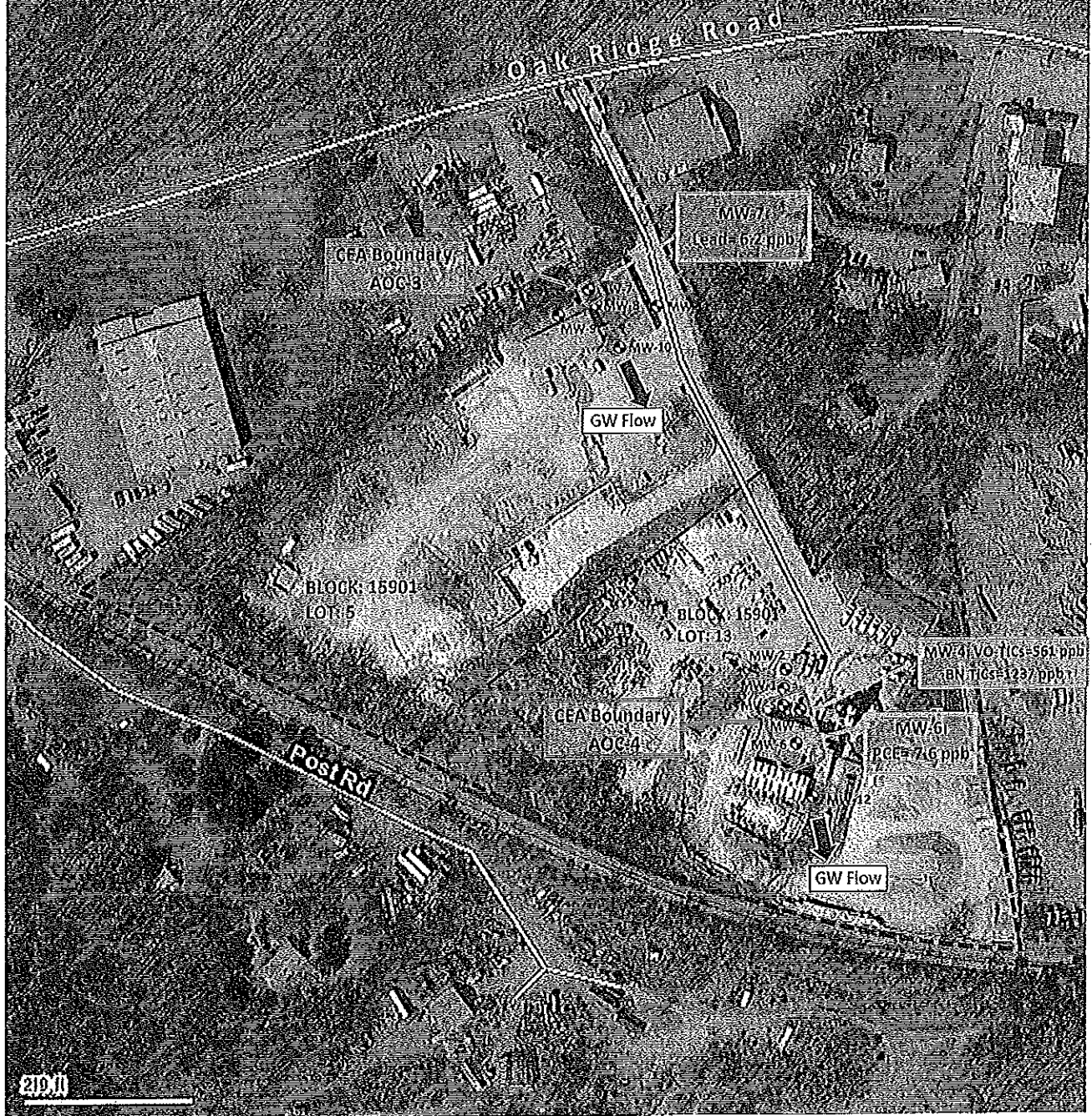
CEA Map 2

PI#294177

SERVICE CONCRETE (Blk 15901, Lot 13)
173 Oakridge Rd, W. Milford, NJ

Created By	Date Created	Reviewed By	Date Reviewed
C. Crum	4/11/2016	M. Alcalá	4/11/2016

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Environmental & Geotechnical Services, LLC



CEA Map
With Proposed CEA Boundaries

Service Concrete
173 Oak Ridge Rd
West Milford, NJ 07480
Block: 15901, Lots: 5/13
PI#294177

Drawn By	Date Created	Reviewed By	Date Reviewed
CC	4/20/2016	MA	4/21/2016

Calculations for CEA Duration (PCE)
 Service Concrete
 SRP PI # 294177
 Oak Ridge Road, West Milford, NJ

Estimated time for PCE to degrade to compliance levels

k = rate constant	0.693	
Co = initial highest conc	7.6 ug/l	6/12/2015
C = Compliance Level	1 ug/l	
T = half-life	540 days	

$$t \text{ (days)} = \{-\ln(C/Co)/k\} * T$$

$$t = 1580 \text{ days}$$

$$4.3 \text{ years}$$

Expiration of CEA: 10/9/2019

Average Linear Velocity (V_x)

K = hydraulic conductivity	0.245 ft/day
l = hydraulic gradient	0.014
n = effective porosity	0.2 (for fine sand and silt)

$$V_x = Kl/n$$

$$V_x = 0.017 \text{ ft/day}$$

Distribution Coefficient (K_d)

K_{oc} = soil-water partition coefficient	2.38
f_{oc} = fraction of natural organic carbon	0.005

$$K_d = (K_{oc})(f_{oc})$$

$$K_d = 0.012$$



Oak Ridge Industrial Establishment

Topographic Site Location Map



0 500 1,000 2,000 FEET

Environmental and Geotechnical Services, LLC

301 Fairfield Road
Fairfield, New Jersey 07004

West Milford, Passaic County, NJ

SCALE

1: 24,000

DATE

Aug 2013

DRAWN BY

MA

7.5 MINUTE QUAD

Newfoundland