IMPACT ENVIRONMENTAL



welcome to solid ground...

170 Keyland Court | Bohemia | NY | 11716 | 631.269.8800

www.impactenvironmental.com

May 19, 2025

Mr. Aaron Fischer **New York State Department of Environmental Conservation** Division of Environmental Remediation 625 Broadway, Albany, New York 12233

Re: Source Removal Remedial Work Plan 318 Nevins Street, Brooklyn, NY NYSDEC Site Number: C224350

Dear Mr. Fischer:

Impact Environmental has prepared this Work Plan to address remaining untreated source material located beneath ISS columns that could not be completed to terminal treatment depth of NAVD88-19' due to subsurface obstructions encountered during installation activities. ISS implementation began on January 6, 2025, and was completed on April 11, 2025. The Site is participating in the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP Site No. C224350). The work described herein was performed in accordance with the Remedial Action Work Plan (RAWP) approved on October 12, 2023, and the DER-10 Technical Guidance for Site Investigation and Remediation (May 2010).

ISS Obstructions

Obstructed columns in Grid 5 consist of column locations 127, 128, 166, 168, 169, 176, 177, 213 and 221. Depths of obstructions range from approximately 8.5 to 11 feet below grade surface (bgs) for most of the obstructed columns. Two (2) columns located in Grid 5 (166 and 221) were obstructed at 20 and 22 feet below grade surface. These two (2) columns will be left in place and will not be addressed by further activities.

Obstructed columns in Grid 4/8 consist of column locations 225, 227, 249 through 253, 262 through 267, 286 and 288. Depths of encountered obstructions ranged from approximately 8.5 to 11 feet bgs. The materials encountered for each obstruction consisted primarily of concrete associated with former building foundation elements and rebar.

Source Removal Activities

A 45-mil rubber pond liner with a 4' diameter cut out for the casing location will be placed in the immediate drill area to contain spoils generated from auguring activities which will be transferred to either an adjacent dry stockpile or a dewatering box (see Materials Management Section below).

Using a 48" casing in combination with a 42" augur with a core barrel, Kingdom Associates (Kingdom) will drill through the top layer of ISS treated material and obstructions using a DELMAG RH34 drill rig down to the terminal ISS treatment depth of NAVD 88-19 in order to remove the NAPL/GCM source material. Refer to **Appendix A** for the drill rig specifications. The obstructed areas to be treated with source removal is approximately 1,068 square feet, with approximately eighty-five (85) casing placement locations planned. Approximately 15 CY of material is anticipated to be generated per casing location. Refer to **Figure 1** for the casing placement layout.

When encountering obstructions, Kingdom can employ either a core barrel, a hammer attachment within the casing or a cluster hammer drill to break up obstructions. Kingdom anticipates a completion rate of approximately two to three casing locations per day, depending on time needed to drill through obstructions.

When the terminal drilling depth for each casing location is reached Kingdom will verify the depth has been reached with a measuring tape inside the casing. Each planned casing location will be geo-located based on survey data and provided to Kingdom for accurate rig and casing placement.

Waste Classification Sampling

Waste classification sampling will be conducted for disposal facility approvals. The DEC will be properly notified of the intended facility prior to off-site transportation.

Materials Management

Soils generated during auguring and/or core barrel activity will be managed in two ways:

- Wet or saturated soils will be placed in a dewatering roll off container placed on top of secondary containment and drained liquids will be pumped into a frac tank. Once the soil is sufficiently dry, it will be trucked out during live loading activities. Typical specs for dewatering boxes are included in **Appendix D**.
- 2. Dry(er) soils will be staged on a stockpile that will be lined with 45 Mil Rubber Pond Liner followed by poly sheeting and live loaded to trucks for disposal.

As a contingency, if liquid generation is excessive, Kiln dust or saw dust will be employed to lower liquid content.

Equipment Staging Area

A number of drill rig attachments will be utilized and/or available during the source removal activities. While hammer breakers and cluster hammers utilized for obstruction removal are unlikely to come into contact with NAPL/GCM material, the core barrel and augur rods will be in contact with NAPL material. A decontamination and staging area will be built (similar to prior truck wash constructions) angled to drain into a temporary container with a sump that will discharge to the frac tank, with a base layer of 45-Mil rubber pond liner and a top layer of poly sheeting and covered in gravel. Drilling equipment will be sprayed with Remedia[™] Hydrocarbon Stabilizer/ATMOS Foam while being staged and temporarily not in use and decontaminated at the end of each working day.

Odor Control Plan

During source removal activities, odor suppression techniques will be employed to contain and suppress odors in accordance with the Odor, Dust and Nuisance Control Plan in the approved RAWP and Section 4.6 (ISS Equipment Decontamination and Swell Management) in the approved ISS RDWP. All necessary means will be employed to prevent on- and off-Site odor nuisances. Specific odor control methods to be used during all remedial activity work will include the following:

- 1. Three ATMOS Foam units will be deployed and operational for foam coverage across different portions of the work areas (ie: roll off containers/stockpile locations, active drilling location), where necessary.
- In addition to the ATMOS Foam and HMA product, Remedia[™] Hydrocarbon Stabilizer will be applied into the drill casing during active drilling above and within the NAPL zones to treat and stabilize odors before NAPL containing spoils reach the surface.
- 3. In addition to the foam, the ATMOS HMA SL-2000 EF product that was approved in the Spill 23-08807 Remedial Work Plan will be used when appropriate for general misting operations. The ATMOS odor neutralizer is an odor neutralizing system that converts odor-causing materials into odor free, stable, non-harmful compounds. The odor neutralizing agent comes in a liquid form and is applied via pressure washer(s) or other delivery systems. Dedicated laborers will be used to continuously spray each foam and odor neutralizer unit during all excavation, loading, staging and/or stockpiling. The contractor will apply the HMA in the open excavation and/or soil disturbance areas as contaminated soil is being exposed during soil movement or ISS activities. The HMA can be applied at ground level to mitigate odors and the foam will encapsulate the remainder of the odors present during active excavation. According to ATMOS, there are no adverse effects or interactions when using the foam and the HMA at the same time.
- Three (3) dedicated laborers will be provided by the general contractor for application of the ATMOS Foam;
- 5. ATMOS foam will be applied to any spoils that are generated during all auger remedial activities:

- a. During consolidation and/or relocation of spoils and associated stockpiles;
- b. General stockpiling of soil;
- c. During trucking load out of stockpiled spoils. During the truck filling each truck bucket interior will be sprayed;
- d. When stockpiles are stagnant, and no additional soil movement is taking place the laborers will ensure that the stockpile is sufficiently coated in foam and covered in poly sheeting;
- e. Spoil stockpiles should be covered in poly once stockpiling is completed. While stockpiling, one pump will be spraying where the material was generated, and the second pump will be spraying where the material is being stockpiled/relocated. Once stockpiling is completed, poly will be immediately placed on the stockpile and 1'-2' skirt of poly will extend beyond the stockpile. No soil will be exposed at any time. Poly will remain on the stockpile until actively trucking for offsite disposal. If additional material needs to be stockpiled, the material will be added to the end of the stockpile instead of removing poly OR a small section of poly will be peeled back so material can be added.
- f. When trucking, poly will be removed from the stockpile in small sections. Laborers will peel back the poly to ensure that the stockpile stays covered during trucking. Once material is removed from the stockpile all exposed material must be sprayed, until only foam or poly is visible. Once the truck is filled, the top of the truck will be sprayed with foam and straps will be put on before the truck is able to leave the site.
- g. While moving mats or material for the next column, foam will be sprayed during all soil disturbance activities until work is completed.
- h. At the end of the day's activities all stockpiles will be covered with poly sheeting in preparation for inactive overnight hours.
- A CAMP station will be situated downwind of the spoil stockpile location(s) to monitor fugitive odors (VOCs) and;
- 7. An additional handheld PID will be used in the general vicinity of active drilling areas, spoils being generated and/or stockpiles to monitor VOC concentrations. Should any nuisance odors be detected at the boundary of the excavation and/or any exceedances are identified on the CAMP or handheld PID above thresholds outlined in the approved CAMP, work will be halted, and the source of the odors will be corrected. Work will not resume until all nuisance odors have been abated.

Borehole Backfill

Once source removal activities are completed to the terminal depth, the borehole will be backfilled with Flowable fill and previously approved limestone DGA. In order to avoid water displacement at grade surface, Flowable fill

will be pumped from the terminal depth of the casing to approximately 20 feet below grade surface, followed by DGA from 10 to 20 feet bgs and then flowable fill from grade surface to 10 feet bgs. The Flowable fill will be obtained from Empire Transit Mix of 430 Maspeth Avenue, NY, NY. The flowable fill consists of a 50 PSI strength concrete fill. Refer to **Appendix C** for the flowable fill specifications.

Please contact me at (631) 269-8800 with any questions.

Sincerely, IMPACT ENVIRONMENTAL ENGINEERING AND GEOLOGY, PLLC

Brad Summerville, P.E.

<u>5/19/20</u>25

NYS Professional Engineer #091879

Date

Signature



Attachments-Figure 1: Casing Placement Layout Appendix A: Drill Rig Specs Appendix B: Remedia[™] Hydrocarbon Stabilizer Specs Appendix C: Flowable Fill Backfill Specs Appendix D: Dewatering Roll-off Box Specs

Figure 1 Casing Placement Layout



IMPACT ENVIRONMENTAL 170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800 FAX: (631) 269-1599



Appendix A Drill Rig Specs



IMPACT ENVIRONMENTAL 170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800 FAX: (631) 269-1599



Drehbohranlage Drill Rig

RH 34





DELMAG Drehbohranlage RH 34 DELMAG Drill Rig RH 34

Technische Daten Technical data



DELMAG

Alle Maßangaben in mm / All dimensions in mm

2

RH 34



Mäkler / Leader Mast

marrier / Eea					
Gesamthöhe		total height		mm	25570
Neigungen:	links / rechts	Inclination:	left / right	Grad	9,5 / 9,5
	vor / zurück		forward / backward	Grad	4 / 14
Bohrtisch Verfahrwe	g	Stroke rotary head		mm	17500
Vorschubkraft (am Schlitten)	auf / ab effektiv	Crowd force (on guiding carriage)	up / down effective	kN	420 / 330
	auf / ab nominal		up / down nominal	kN	530 / 420
Eilgang	auf / ab	Rapid gear	up / down	m/min	28,5 / 28,5
Lastgang	auf / ab	Working gear	up / down	m/min	5,5 / 5,5
Mäklerfuß	starr	Leader mast foot	fix		
Stützzylinder	Hub	Support cylinder	stroke	mm	1660
	Zylinderkraft (bei 300 bar)		cylinder force (at 300 bar)	kN	750
- Teller abnehmbar		- detachable brace pla	ate		
	1 611				

- Anschlüsse für Schneckenführungs-

- connection for auger guide support integrated

aufnahme im Mäklerfuß integriert

in leader mast foot

Vorschubwinde / Crowd Winch				
Seildurchmesser	Line diameter	mm	28	
Geschwindigkeit, geschert	Speed, sheared	m/min	5,5 / 28,5	

Kellywinde / Kelly Winch

Freilauf		Free wheeling			
Seilkraft	effektiv / nominal	Line pull	effective / nominal	kN	250/320
Geschwindigkeit	Konstantmotor	Speed	constant motor	m/min	50
	Verstellmotor (Option)		variable motor	m/min	80
Seildurchmesser		Line diameter		mm	30
Nutzbare Seillänge in 1 Lage		Usable line length in the first layer		mm	53000

Hilfswinde / Auxiliary Winch

Seilkraft	effektiv / nominal	Line pull	effective / nominal	kN	100 / 125
Seildurchmesser		Line diameter		mm	20
Geschwindigkeit, e	ingestellt	Speed, adjusted		m/min	30



5.5	
~	•
 х	
	٠

Trägergerät T102D	Carrier T102D
-------------------	---------------

5 5		A CONTRACTOR OF A CONTRACTOR O				
Motor		Engine		SCA	SCANIA DC13	
Leistung		Engine power		kW	405	
Abgasvorschrift	EU Stufe IIIB US EPA Tier 4i (Option) EU Stufe IIIA / US EPA Tier 3 (Option)	Emissions standards	EU Stage IIIB US EPA Tier 4i (option) EU Stage IIIA / US EPA Tier 3 (option)			
Abgasnachbehandlu	ungssystem	Emission after treatme	ent system	SCR	/ AdBlue	
HydrBetriebsdruck	(Pumpenausgang)	Working pressure (pu	Working pressure (pump output)		330	
Hydraulikpumpen (e	ingestellt)	Hydraulic pumps (adjı	usted)	l/min	2 x 300 1 x 310 1 x 200	
Hydrauliktank (Füllst	tand / Fassungsvermögen)	Hydraulic tank (liquid	level / capacity)	I	910 / 1200	
Dieseltank		Diesel tank		1	890	
Unterwagen		Undercarriage		S7()/50CVT	
	Zugkraft bei 320 bar		pulling force at 320 bar	kN	935	
	Fahrgeschwindigkeit		Driving speed	km/h	1,2 - 2,0	
Umgebungstempera	aturbereich	Ambient temperature	range	°C	-20 +40	
Anschluss Verrohrungsmaschine - mit oder ohne integrierter Steuereinheit		Connection casing oscilator - with or without integrated control system		(Option	
Geländer am Oberwagen (klappbar)		Uppercarriage railing	(foldable)	C	Option	

Bohrtisch BT 340 / Rotary Head BT 340

Drehmoment bei 320 bar	Torque at 320 bar	kNm	335
Drehzahl bei max Drehmoment / nominal	Revolutions at max torque / nominal	1/min	9
Bohrdrehzahl, Lastgang	Revolutions rock gear	1/min	0 - 26
Abschleuderdrehzahl	Revolutions spin off	1/min	55
freier Durchmesser vor Vorschubseilen (erweiterte Bohrachse auf Anfrage)	Free diameter in front of the crowd pulleys (extended drilling axle on request)	mm	2200
Abstand Bohrachse zu Vorderkante Mäkler	Distance mast - center head	mm	1220
Gewicht	Weight	kg	7950







t

Einsatzgewicht / Operating Weight

Gewicht (ca.) mit Bohrtisch, Kellystange 3-27, Druckrohr und Anfänger Weight (approx.) with rotary head, Kelly bar 3-27, casing connector and starter

105

Transportgewichte	/ Transport	Weights
-------------------	-------------	---------

ohne Bohrtisch, ohne Kellystange	without rotary head, without Kelly bar	t	87
ohne Ausrüstung und ohne Gegengewicht	without equipment and without detachable counterweight	t	74,5
ablegbares Gegengewicht (Option)	detachable counterweight (option)	t	10,5 + 2
ablegbare Fahrschiffe	detachable crawler track units	t	2 x 9,2

Transportmaße / Transport Dimensions



Anwendungen / Procedures

Kellybohren Kelly Drilling



DELMAG

 \mathbf{X}



Anwendungen / Procedures SOB-Bohren **CFA** Drilling 1111111111111111 20200 17500 D. Section 1 courses

Schlagendes Rammen Impact pile driving



mit hydraulischem Freifallhammer SuperRAM 10000XL bzw. mit DELMAG Dieselbär (andere Mäklerkopfausführung notwendig) with hydraulic impact hammer SuperRAM 10000XL or DELMAG diesel pile hammer (different mast head design necessary)

Weitere Anwendungen auf Anfrage / other applications on request



© ABI GmbH, Niedernberg/Deutschland. Nachdruck, auch auszugsweise, nur mit schriftlicher Genehmigung der ABI GmbH/Niedernberg.











Weitere Informationen erhalten Sie bei Ihrem DELMAG Verkäufer. Oder besuchen Sie uns im Internet unter: www.delmag.de, Änderungen in Konstruktion und Ausstattung sind vorbehalten. Die Angaben in diesem Prospekt sind als annähernd zu betrachten. Die Abbildungen können auch Sonderausstattungen enthalten, die nicht zum serienmäßigen Lieferumfang gehören. Nicht dargestellte Ausstattungsvarianten können zu Änderungen der technischen Daten führen.

For further informations please contact your DELMAG sales assistant, Or you visit us on the Internet at www.delmag.de, Design subject to modifications. The details in this leaflet have to be regarded as approximate. The illustrations also can contain special outfits which are not part of the standard scope of supply. Not represented equipment variants can lead to modifications of the technical data

ABI Maschinenfabrik und Vertriebsgesellschaft mbH Am Knückel 4 D-63843 Niedernberg Germany

Telefon: +49 (0) 6028 123-101, -102 Telefax: +49 (0) 6028 123-109 eMail: info@abi-gmbh.de



www.abi-group.com

Appendix B Remedia Hydrocarbon Stabilizer Specs



IMPACT ENVIRONMENTAL 170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800 FAX: (631) 269-1599





Hydrocarbon Stabilizer SAFETY DATA SHEET

1	HEALTH
0	FLAMMABILITY
0	REACTIVITY
	REAVITIT
0	PPE

Trade Name: RemediaTM Hydrocarbon Stabilizer

Date Prepared: 11/2015

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Remedia TM Hydrocarbon Stabilizer
Product Description:	Liquid, water-based.
Manufacturer:	RPS Environmental Solutions, LP
	10455 N. Central Expwy #109-372 Dellas TX 75221
	Phone Number 972-247-1556
Mastar Distributor	Remedia International Inc
Master Distributor	501 Capitol Trail, Ste 101
	Newark DE 19711
	Phone Number 1-844-329-1400
For Customer Service Call:	1-843-538-1335
	1-844-329-1400

2. HAZARD(S) IDENTIFICATION

Eye Contact: Skin Contact: Inhalation: Ingestion: Chronic Hazards:	May cause irritation. May cause moderate irritation; large amounts can cause dryness. Spray mist may cause some irritation to mucus membranes May cause upset of gastrointestinal tract No known chronic hazards. Not listed by NTP, IARC or OSHA as carcinogen
Chronic Hazards:	No known chronic hazards. Not listed by NTP, IARC or OSHA as carcinogen
Physical Hazards:	Can etch glass if not promptly removed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

The OSHA Hazardous communication Standard (29 CFR 1910. 1200) does not require the listing of any ingredient for this product.

Chemical & Common Name	Wt%	OSHA PEL	ACGIHTLV
Water & Inert Ingredients	>87%	Not Established	Not Established
Proprietary Ingredient 1		Not Established	Not Established
Proprietary Ingredient 2		Not Established	Not Established
Proprietary Ingredient 3	-1.0 /	Not Established	Not Established
Other non-hazardous ingredients	<1%	Not Established	1.00 Estublished

4. FIRST AID MEASURES

Eye:	In case of contact, immediately flush eyes with plenty of water.
Skin:	In case of contact, immediately flush skin.
Inhalation:	Remove to fresh air.
Ingestion:	If swallowed, DO NOT induce vomiting. Give large quantities of water or milk.

5. FIRE FIGHTING MEASURES

Flammable limits:	This material is not combustible.
Extinguishing Media:	This material is compatible with all extinguishing media
Hazards to fire-fighters	None
Fire-fighting equipment:	Standard issue firefighting equipment

6. ACCIDENTAL RELEASE MEASURES

Personal protection:	Wear appropriate safety gear.
Environmental Hazards:	Totally miscible with water. Water will evaporate from spill of this material.
Spill cleanup	Mop up and neutralize liquid with water, then discharge to sanitary sewer in accordance with federal, state and local regulations or permits.
CERCLA RQ:	There is no CERCLA Reportable Quantity for this material. If a spill goes off site notification of state and local authorities is recommended
	site, notification of state and local authorities is recommended.

7. HANDLING AND STORAGE

Store in plastic or stainless steel tanks or containers. Shipments may be made in plastic bottles, 5 gallon pails, 55 gallon plastic totes, and stainless tank trucks. Storage temperature 0° - 43° C (32° - 110° F)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

See Section 3 and Section 4. HMIS Ratings: (scale 0-4) Health = 1, Fire = 0, Physical Hazard = 0

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid
Color	Water-like
Odor	Essentially odorless
pН	10.4 +/- 0.7
Specific gravity	1.030 +/- 0.01
Solubility in water	Miscible
-	

10. STABILITY AND REACTIVITY

Stability	This material is stable under all conditions of recommended use and storage
Conditions to Avoid	None
Materials to avoid	Highly acidic materials
Hazardous decomposition	
products	None

11. TOXICOLOGICAL INFORMATION

Special Studies:

Proprietary ingredient 1 is not mutagenic to the bacterium E. Coli when tested in a mutagenicity bioassay. There are no known reports of carcinogenicity of any ingredients. Frequent ingestion over extended periods of time of gram quantities of proprietary ingredient 1 is associated with the formation kidney stones. No ingredient is listed by IARC, or OSHA as a carcinogen. Proprietary ingredient 2 is an FDA approved additive for internal delivery of drugs.

12. ECOLOGICAL INFORMATION

Eco toxicity:	The following data is reported for proprietary ingredient 1 on a 100% concentration basis: A 96 hour median tolerance for fish (Gambusia affnis) of 2320 ppm; a 96 hour median tolerance for water fleas (Daphnia magna) of 247 ppm; a 96 hour median tolerance for snail eggs (Lymnea) of 632 ppm; and a 96 hour median tolerance for Amphipoda of 160 ppm.
Environmental Fate:	Proprietary ingredient 1 is naturally in aquatic systems and does not contribute to BOD. This material does not harmfully bioaccumulate.
Physical/Chemical:	Totally miscible with water.
13.DISPOSAL CONSIDERATION	
Classification:	Disposed material is not a hazardous waste.
Disposal Method:	Recycle container in accordance with federal, state and local regulations. Flush neutral liquid to sanitary sewer accordance with federal, state and local regulations and permits.

14. TRANSPORT INFORMATION

DOT UN Status:

This material is not regulated for transportation.

15. REGULATORY INFORMATION

CERCLA:	No CERCLA Reportable Quantity has been established for this material.
SARA TITLE III:	Not an extremely hazardous substance under §313 or under §§311/312.
TSCA:	All ingredients of this material are listed on the TSCA inventory.
FDA:	The use of soluble silicates is authorized by FDA as a boiler water additive for the
	production of steam that will contact food pursuant to 21 CFR §173.310; as a component of
	matrix coatings on food contact surfaces pursuant to 21 CFR §175.390(c); as a GRAS
	substance when migration from cotton fabric used in dry food packaging pursuant to 21 CFR
	\$182.70; and as a products pursuant to 21 CFR \$182.90.
	Glycol blends has GRAS (generally regarded as safe) status by FDA for use as a
	direct food additive. It is used in oral, injectable, and topical pharmaceuticals.

California Prop. 65	Not Listed. We do not knowingly add any Prop. 65 chemical nor do we know of any impurity in
	any ingredient that is on the Prop 65 list.

16. OTHER INFORMATION

Prepared by:	T.D.
Supercedes revision of	10/2022

THIS INFORMATION ON THIS SAFETY DATA SHEET IS BELIEVED TO BE ACCURATE AND IT IS THE BEST INFORMATION AVAILABLE TO Remedia Technologies LLC. THIS DOCUMENT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONS FOR HANDLING A CHEMICAL BY PERSONS TRAINED IN CHEMICAL HANDLING, Remedia Technologies LLC MAKES NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED WITH RESPECT TO SUCH INFORMATION OR THE PRODUCT TO WHICH IT RELATES, AND WE ASSUME NO LIABILITY RESULTING FROM THE USE OR HANDLING OF THE PRODUCT TO WHICH THIS SAFETY DATA SHEET RELATES. USERS AND HANDLERS OF THIS PRODUCT SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION PROVIDED HEREIN FOR THEIR OWN PURPOSE.

Appendix C Flowable Fill Backfill Specs



IMPACT ENVIRONMENTAL 170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800 FAX: (631) 269-1599

IMPACT

CONCRETE & CONTROL INSPECTIONS, INC. 15-46 129TH STREET, COLLEGE POINT, NEW YORK 11356 TEL: (718) 939-7774 FAX: (718) 939-6444

CONCRETE MIX DESIGN REPORT

CLIENT: Project:	Sethera Laurency Empire Transit mix 430 Maspeth Avenue , NY , NY 11211 QC mix 2012/13	Kingdom Asscociates 570 5th Aveune Manhattan NY	DATE: LAB NO MIX TYP METHOI SAMPLE	:: 2E: D: ED BY:	12/23/15 2015-12-23-15F Flowable Fill Trial Im[pact
Supplier:	Empire Transit Mix		Expire o	n:	Does Not expire
	50- 50 Flowable-fill 50 PSI Hi	gh Flow Concret e@ 28 Days			
Product	Source & Ty	pe	ASTM	S.G.	NYS Source No.
Cement	Lehigh-II	AST	M C150	3.15	
Slag	Holcim Lafarge 120	AST	M C989	2.88	-
Silica Fume	-	AST	M C1240	2.20	-
Fine Agg.	L I Natural	AST	M C33	2.62	-
Coarse Agg.	NY Sand and Stone (#67)	AST	M C33	2.65	-
Coarse Agg.	NY Sand and Stone (#8)	AST	M C33	2.65	-
Water	NYC Potable	AST	M C94	1.00	-
Admixture 1	Euclid Easy Fill	AST	M C260	1.03	-
Admixture 2	,	AST	M C494	1.20	-
Admixture 3			-		-



Compressive Strength vs. Water Cement Ratio



IMPACT

CONCRETE & CONTROL INSPECTIONS, INC. 15-46 129TH STREET, COLLEGE POINT, NEW YORK 11356 TEL: (718) 939-7774 Fax: (718) 939-6444

					CC	ONCRE	TE MI	X DES	IGN RE	EPORT						
CLIENT:		Sethera Laurency									DA	TE:	12	12/23/15		
		Empire Tr	ansit mi	ix							LA	B NO.:	20	15-12-23	8-15F	
		430 Masp	eth Ave	nue , N	IY , NY	11211					MD	X TYPE:	FI	owable l	Fill	
PROJECT:		QC mix 2012/13									ME	THOD:	Tr	Trial		
		0									SA	MPLED B	Im Im	[pact		
SUPP	LIER:	Empire Tr	ansit Mi	ix							DE	LIVERED	BY: D	oes Not	expire	
50 PS	High	Flow Con	cret e	28 Da	ays											
50 - 50		abkle_fill				Ag	grega	te Gra	diation	1						
00 00	1101					Pa	ssing	Percer	nt Fine	r						
		Sie	ve Size					F.A.		C.A	A. #67	CA #8	FA C-33	CA #67	CA #8	
		2"												C-33	C-33	
		1	1/2"											/		
			1"						_					100		
			3/4"											90-100		
			1/2"		_								100 /	00.55		
			3/8"					100.0					100	20-55		
		# 4				100.0					101	X	95-100	0-10		
		#8						80.9			an you		80,100	0-5		
		# 16						80.4		-12	ALEM		20-00			
		# 30			_			53.2		14	A		20.00			
		# 50						14.7					0-10			
	# 100						2.70		EX	Hard						
						2.10		Vin	D. al		15/					
	-	Sneci	fic Grav	vity				2.62		N	2 65	2 65	2			
		Colon	netric T	est			F	Plate #	1	1	LICA	NCED PROT				
		001011	T	RIAL	IIXES	- DRY	BATC	HWE	GHTS	(lbs./	abic	Yards)				
Point	Vield	Cement	Slag	Silica	FA	C A-1	CA-2	Water	Adx 1	Adx 2	Adx 3	Unit Wt.	Slump(in	W/C	Air	
1	25.4	50	50	0	2495	0	0	40.0	3.0	0.0	0.0	97.2	7.50	3.376	21.0	
2	26.4	50	100	0	2560	0	0	35.0	3.0	0.0	0.0	96.0	8.00	1.969	28.0	
3	26.4	300	100	0	2130	0	0	45.0	3.0	0.0	0.0	116.0	9.50	0.950	18.0	
4	26.0	300	100	0	2300	0	0	35.0	3.0	0.0	0.0	100.8	9.00	0.739	22.6	
								-	1	1	1		1	1		

COMPRESSIVE STRENGTH RESULTS (ASTM C39) - P.S.I. (4" x8" Cylinders)---

Point	w/c ratio	28 Days	Results	Average	56 Days Results			Average
1	3.376	41	95	68	97	103	91	97
 2	1.969	101	215	158	254	283	325	287
3	0.950	1120	1498	1309	1833	1838	2197	1956
4	0.739	924	1120	1022	1509	1349	1583	1480
						78		

Appendix D Dewatering Roll Off Box (Typical Specs)



IMPACT ENVIRONMENTAL 170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800 FAX: (631) 269-1599

Type DB-8

DEWATERING BOX 8 M³

IDEAL USAGE

Projects that require dewatering of sludge

APPLICATIONS

Dewatering of solid waste or sludge with a good dewaterability:

8.4 m³

390 µm

1,770 mm

2,547 mm

6,500 mm

50 °C

3,600 kg (approx.)

lower side opening

excavator

corners (x4)

PN 16 DN 100 flange in tipping door to connect (sludge) pump or vacuum truck Direct unloading (from vacuum) trucks by using

Fast grips to secure unloading hoses Removable support beams for easy filling for

PN 16 DN 50 flanged ball valves SS all

External ladder of S235 carbon steel

4" flange at inside door to connect and elbow

8,400 litres (dry) sludge

- Coarse sludge, such as plastics and metal particles
 Mineral sludge, such as sand and grits

WEIGHT AND MEASURES

Capacity:

Filter range:

Volume:

Height:

Width:

Length:

Weight:

Max Temperature:

FEATURES Filling onnections:

Drain valves:

Access:

Misc. connections:

• Organic sludge, such as leaves, wood, soil or a combination of these



TRANSPORT

Hookloader:	Hook adjustable to different EU standards: 1.57 m and 1.43 m Roller wheels rubber protected (x2) at rear to allow easy and silent sliding on the ground (x1)
Cable lifting:	Frame equipped with connections for cable lifting system
Lifting:	Lifting eyes on top of frame (x4)
Transportation lock:	Designed for various hydraulic locking systems, not suitable for C-lock system

SURFACE DETAILS

k
k
IC

QUALITY AND SAFETY

- Quality control inspections level 1, 2, & 3 on a scheduled basis
- Depending on the classification of sludge and the competence of the transporter, the container is equipped for the dewatering and transport of ADR waste
- Hydrostatic water tested
- Special beams to increase construction strength •
- Removable permeable screens for easier cleaning & inspection

PATENT

International Patent Pending - PCT/US19/43426



UnitedRentals.com

Technical drawing

Type DB-8





Cat Class #610-5050 | PDS Dewatering Box 8 m³ | Drawings & Images are for representation only. Actual product may vary. | Publish Date 01.07.2021 | Revision No: 03

UnitedRentals.com

20 YARD

Dewatering Roll Off Box

Dewatering Box rentals from Ironclad Environmental Solutions are passive-gravity dewatering containers available in all Roll-tarp, Metal-Lid and Vacuum. Each roll-off box is equipped with a steel-frame screen-insert which creates a French drain system within the individual containers interior. Dewatering boxes are available to separate liquid from sludge and slurry and to simplify waste disposal.



Dimensions and Weights

Construction

Length: 23' 1 3/8"

Width: 97"

Height: 4′ 6 3/8″

Capacity: 20 cubic yard (4,040 gallons)

Tare Weight: 9,550 lbs

Floor: ¼″ A36 plate Walls: 3/16″ A36 plate Long Sill: 6 x 2 x ¼″ tubing

Features

Drain: Two 1″ flanged drain (curb and street)

Liner hooks: 24" all around

Wheels: 10" steel

ROLL OFF BOX

Dewatering Box Drawing



Top View





*Some details not shown in all views. Overall dimensions are normal.

*Photos are representational; actual products vary. Additional product plans and specifications may vary from those shown and are subject to in-stock availability.

Side View



Front View



Rear View