

FOI#14301

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September 24, 2013

**VIA UPS NEXT DAY
AND REGULAR MAIL**

Daniel D. Duffy, FOI Administrator
Port Authority of New York and New Jersey
225 Park Avenue South, 17th Floor
New York, NY 10003

Re: **DONJON MARINE CO., INC./THE PORT AUTHORITY OF NEW
YORK AND NEW JERSEY - FOIA REQUEST**

Dear Mr. Duffy:

Please be advised that this office represents Donjon Marine Co., Inc. ("Donjon"). In that capacity, we are transmitting this correspondence to you as a formal request on behalf of Donjon to the Port Authority of New York and New Jersey ("PA") for copies of the following documents:

1. Copies of any and all communications or negotiations and/or settlement discussions for processing and/or placement of dredged sediments, including but not limited to, letters, memoranda, and emails, received by the Port Authority from Utex from January 1, 2005 through May 2010 regarding any and all potential, realized or unrealized agreements entered into between the Port Authority and Utex for the receipt, unloading, handling and/or processing of dredged materials resulting from the Multi-Facility Maintenance Dredging Contract, No. MFP-654.130, dated May 2010, entered into between the Port Authority and Donjon Marine Co.

2. Copies of any and all communications or negotiations and/or settlement discussions for processing and/or placement of dredged sediments, including but not limited to, letters, memoranda, and emails, received by the Port Authority from Utex from January 1, 2005 through May 2010 regarding any and all potential, realized or unrealized agreements entered into between the Port Authority and Utex for the receipt, unloading, handling and/or processing of dredged materials.

3. Copies of any and all communications or negotiations and/or settlement discussions for processing and/or placement of dredged sediments, including but not limited to, letters, memoranda, and emails, received by the Port Authority relating to any alleged patent infringement between the Port Authority, Utex, Donjon and/or Clean Earth, as well as any and all communications relative to whether Utex and the Port Authority engaged in any written discussion, exchange of documents, and/or emails relative to the USACE using Utex exclusively.

4. Copies of any and all potential, realized or unrealized agreements or negotiations and/or settlement discussions for processing and/or placement of dredged sediments between the Port Authority and Utex, or its related entities, and any and all communications related thereto, including, but not limited to, letters, memoranda and emails.

5. Copies of any and all documents or negotiations and/or settlement discussions for processing and/or placement of dredged sediments, including, but not limited to, letters, memoranda and emails, relating to claims of patent infringement as between the PA, Utex (and related entities), Donjon, and/or Clean Earth.

Kindly provide a copy of the above-referenced documents to this office at your earliest convenience and advise as to any costs associated with this request.

Very truly yours,



Raymond R. Wiss

RRW/cm

cc: Jonathan P. Meinen, Esq.
Donjon Marine Co., Inc.

THE PORT AUTHORITY OF NY & NJ

FOI Administrator

March 13, 2014

Mr. Raymond R. Wiss
Wiss & Bouregy, P.C.
345 Kinderkamack Road
Westwood, NJ 07675

Re: Freedom of Information Reference No. 14301

Dear Mr. Wiss:

This is in response to your September 24, 2013 request, which has been processed under the Port Authority's Freedom of Information Code (the "Code") for copies of records between the Port Authority, Utex, Donjon and/or Clean Earth related to Contract No. MFP-654.130 - Multi-Facility Maintenance Dredging.

Material responsive to your request and available under the Code can be found on the Port Authority's website at <http://www.panynj.gov/corporate-information/foi/14301-LPA.pdf>. Paper copies of the available records are available upon request.

Certain material responsive to your request is exempt from disclosure pursuant to exemptions (1) and (5) of the Code.

Notwithstanding the overly broad nature of Item No. 4 of your request, a copy of the settlement agreement between the Port Authority and Utex was previously provided to you on December 9, 2013. There are no additional agreements between the Port Authority and Utex.

Please refer to the above FOI reference number in any future correspondence relating to your request.

Very truly yours,



Daniel D. Duffy
FOI Administrator

225 Park Avenue South, 17th Floor
New York, NY 10003
T: 212 435 3642
F: 212 435 7555



April 12, 2010

Matthew H. Masters
Port Commerce Department
The Port Authority of NY & NJ
335 Park Avenue South, 11th Floor
New York, NY 10003

RE: NJMT Multi-Facility Maintenance Dredging Contract MFP-654.130

Dear Mr. Masters:

In reference to NJMT Multi-Facility Maintenance Dredging Contract MFP-654.130, please direct your contractor to deliver barges of processed dredged material to the UTEX/380 Facility located in Staten Island, New York. The wharf at the UTEX/380 Facility is 500 feet long and the berthing area is 25 feet deep below mean low water. UTEX has the ability to handle up to 2 barges (3,000 cubic yard capacity each) within a 24 hour operating period and will operate 24 hours/7 days per week on an as needed basis. UTEX will be responsible for off-loading through placement of the processed dredged material at a permitted upland location. The barge(s) of processed dredged material delivered to the UTEX/380 Facility by the Port Authority's contractor will be emptied and available for pick-up within 24 hours subject to acceptance schedule herein.

Immediately after receiving the Contractor's notification, the Port Authority will provide UTEX the approximate time for the delivery of processed dredge material [PDM] to the UTEX/380 facility. It is anticipated that the delivery time will be within a two hour plus or minus window to account for unforeseen conditions. Acceptance of barge or truck delivered PDM will be between the hours of 6:00 am and 6:00 pm Monday through Sunday subject to inspection of the PDM by representatives of the Port Authority and UTEX. The UTEX/380 facility will accommodate the contractors berthing or pick-up of marine barges on a 24-hour 7-day per week basis. With prior advance notification, UTEX may accommodate acceptance of PDM at other times at no additional cost to the Port Authority.

Acceptance at the UTEX/380 facility is subject to inspections of the delivered PDM to determine that the PDM has soil like characteristics, no free water, debris restricted to no larger than 6" in any dimension and have no frozen material or other deleterious matter as set forth in the Contract. If during the unloading of the PDM unacceptable characteristics are found with the PDM, the Port Authority inspector will ascertain the reported condition and if concurred with the UTEX reported findings, the Port Authority will direct the Contractor to take corrective action.

Sincerely,

A handwritten signature in black ink that reads "Rick Redle". The signature is fluid and cursive.

Rick Redle
Senior Vice President

RR/lf

Masters, Matt

From: Rickr UTEX [rickr@hotmail.com]
Sent: Thursday, March 04, 2010 12:17 PM
To: Masters, Matt
Subject: various
Attachments: Page_5_from_040526_Bathymetric_Survey.pdf

Matt: in continuation of providing info.

We have approximately 1,400 linear feet of berthing/wharf at the former GATX property on Staten Island. The attached represents approximate depth along the wharf. We haven't taken recent soundings but anticipating some shoaling we would expect it to vary from the low 20's to mid 20's at low mean sea level which should accommodate typical 3000 cubic yard barges.

As to your question on the percentage of cement [8%]. While the contracted percentage levels you specify to the sediment's stabilization and treatment processor have been established under environmental criteria we would acknowledge that 8% by weight has typically provided PDM having suitable structural bearing characteristics for our purposes [assuming no free water]. If alternative additives are substituted for the cement or supplemented with the cement we will need to be made aware of this prior to determining suitability and or accepting. That said we will always be open to revisiting this aspect if it is beneficial to the PA while still meeting acceptable environmental and structural requirements for our placement.

I spoke with Bayshore yesterday and they are going to forward the permitting documentation you requested. I will forward it as soon as I receive.

Rick Redle
UTEX Holdings, LLC
4570 Westgrove Drive, Suite 240
Addison, Texas 75001
972.407.0701; facsimile 972.931.2218; cell 214.435.2351

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Masters, Matt

From: Rickr UTEX [rickr@hotmail.com]
Sent: Monday, March 01, 2010 3:24 PM
To: Masters, Matt
Subject: RE: Additional information request
Attachments: 20100301134908146dredgeqty.pdf

Matt, good afternoon:

Bayshore: We have two wharfs at Bayshore, one capable of accommodating 700 feet and one capable of accommodating 300 feet and additional tie off areas are also available to us. Depth at Low Mean Sea Level averages around 28 feet.

I will obtain the necessary permitting information that permits the offloading and or processing of sediments. An AUD [specific to Bayshore] would not be applicable since Bayshore will only be serving as transload staging area.

GATX: Site information to follow as I am having to confirm several aspects before reporting to you;

As you are aware we have submitted our surface cover plan documentation for the GATX site to the DEC in lieu of a resubmission for a BUD for PDM. We anticipate receiving a confirming indication from the DEC of suitability for acceptance of the PDM at the site shortly, to which we will submit the letter to your offices. In the interim we have sufficient stockpile capacity to accept the PDM at Bayshore until receipt of that approval is obtained though we believe it will be obtained prior to your anticipated requirements.

We would confirm our capacity to the off loading [at either location] of 2- standard scows [3000 cubic yards nominal capacity] with in a given 24-hour period.

Matt as a matter of clarification is the proposed material that which is identified in the up coming USACE solicitation [see attached] or is it something that is from a separate PA contract and what type of total quantity are your anticipating?

Rick Redle
UTEX Holdings, LLC
4570 Westgrove Drive, Suite 240
Addison, Texas 75001
972.407.0701; facsimile 972.931.2218; cell 214.435.2351

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Subject: RE: Additional information request
Date: Mon, 1 Mar 2010 12:06:19 -0500
From: mmasters@panynj.gov
To: rickr@hotmail.com

Rick,

Thank you for the "Availability Letter" dated 2/25/10. I have a few more information requests that have arisen as we develop our bid documents:

1. Please provide the length of wharf and depth of water at the UTEX/Bayshore Facility.
2. Please provide the length of wharf and depth of water at the UTEX/380 Facility.
3. UTEX needs to provide an AUD or BUD, as applicable, for the site where the processed dredged material will be placed. If not feasible, UTEX should provide a letter to confirm that material dredged from the NJMT berths will be acceptable to be processed / mixed with 8% Portland cement, as stipulated in the NJDEP Permit (General Condition No. 22). A copy of this permit is attached.

In response to your inquiry below, we anticipate delivery of 1 scow per day (about 2,500 to 3,000 cubic yards). However, our pre-qualified dredge bidders were required to be able to demonstrate their ability to dredge and process a minimum of 5,000 cubic yards in a 24 hour day. Therefore, we would like your assurance that if necessary, the UTEX facility can offload 2 scows or 5,000 to 6,000 cubic yards per 24-hour day.

I appreciate your prompt response as we are under short timeframes to complete our bid documents. Please call me if you require any clarification.

Thanks.

Matt

-----Original Message-----

From: Rickr UTEX [mailto:rickr@hotmail.com]
Sent: Thursday, February 25, 2010 2:55 PM
To: Masters, Matt
Subject: RE: Additional information request

Matt; what are you anticipating your daily dredging requirements will be with respect to dredging/processing capacity? We assume that there will be a normal flow of PDM to us as dredged and processed.

If I can get this information from you I can respond appropriately.

"24/7 and as necessary" is correct.

Rick Redle
UTEX Holdings, LLC
4570 Westgrove Drive, Suite 240
Addison, Texas 75001
972.407.0701; facsimile 972.931.2218; cell 214.435.2351

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From: rickr@hotmail.com
To: mmasters@panynj.gov
Subject: RE: Additional information request
Date: Wed, 24 Feb 2010 08:00:50 -0600

Meeting with Rich this am on these aspects back to you today.

Rick Redle
UTEX Holdings, LLC
4570 Westgrove Drive, Suite 240
Addison, Texas 75001
972.407.0701; facsimile 972.931.2218; cell 214.435.2351

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Subject: Additional information request
Date: Wed, 24 Feb 2010 08:37:54 -0500
From: mmasters@panynj.gov
To: rickr@hotmail.com

Rick,

I sent you PA's comments on the "Notice of Availability" letter yesterday afternoon. Please advise when we can expect a signed copy.

I also had a meeting with our Contracting folks and I need some additional information from you that we will need to provide bidders for our upcoming maintenance dredging contract.

Specifically, Clause 8.3 within the Agreement states that the UTEX Facility shall receive dredge scows and trucks 24 hours per day, 7 days per week, on an "as needed" basis.

I need you to provide me with the maximum scow off-loading rates (daily - 24 hr) and/or truck delivery rates for GATX and Bayshore Facilities. Its my understanding that the Bayshore site is not a placement site. Accordingly, UTEX will need to off-load scows into trucks for delivery to ultimate placement location. So its important for our bidders to know the maximum daily volume of PDM they can deliver to each site.

I leave it up to you to decide if you want to add this information into the Notice of Availability letter or provide seperately. Either way I get this info quickly is fine with me.

If you have any question regarding this please call me. I'm here all day.

Thanks.

Matt

-----Original Message-----

From: Rickr UTEX [mailto:rickr@hotmail.com]
Sent: Friday, February 19, 2010 12:43 PM
To: Masters, Matt
Cc: jack leiblernew
Subject: Draft Noticing

Matt; attached is the proposed draft noticing letter that we discussed to be reviewed prior to our issuing. As always we welcome your in put and we are prepared to issue.

Rick Redle
UTEX Holdings, LLC
4570 Westgrove Drive, Suite 240
Addison, Texas 75001

972.407.0701; facsimile 972.931.2218; cell 214.435.2351

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Table 1
Contract Material Volume Estimates by Area

Location of Material / Volume Estimates	HARS Suitable Holocene Age Sediments	HARS Suitable Pleistocene Age Sediments		<u>Non-HARS</u> Suitable Holocene Sediments	Rock (CY)	Total Material Volume (CY)
	Silty Sand (CY)	Glacial Till* (CY)	Red-Brown Clay** (CY)	Black Silt*** (CY)		
Contract Area S-NB-2	107,000	1,092,100	911,300	174,600	71,100	2,356,100
PANY/NJ Berth Widening	0	14,200	9,500	16,400	600	40,700
Contract Area S-AK-1	0	7,600	5,900	57,200	509,700	580,400
<p>* The USEPA, Region 2 and the USACE, NY District determined in a Memorandum For Record dated July 29, 2003, that Pleistocene age glacial till from Newark Bay is characterized for HARS placement.</p> <p>** The USEPA, Region 2 and the USACE, NY District determined in a Memorandum for Record dated January 26, 2000 that Pleistocene age red-brown clay from the greater Newark Bay formation is characterized for HARS placement.</p> <p>*** The New York District will send this Holocene age black silt dredged material to a state-approved site(s), not to the HARS. The volume is included in this table for completeness.</p>						

The purpose of this Public Notice is to solicit comments regarding the proposed placement of these HARS suitable materials at the HARS. These comments, along with all available technical data/information, will form the basis of a determination of whether this proposed placement is in the public interest. The HARS (Figures 4 & 5), located in the Atlantic Ocean off the coasts of New York and New Jersey, is described later in this notice.

Approximately 1,113,900 cubic yards of the proposed dredged material from this proposed work has been demonstrated to be Pleistocene age glacial till. The joint U.S. Environmental Protection Agency – Region 2 and U.S. Army Corps of Engineers – New York District July 29, 2003 Memorandum For The Record titled Joint Federal Position on Testing of Glacial Till Dredged Materials from Selected Areas of New York – New Jersey Harbor concluded that Pleistocene age glacial till is removed from sources of contaminants and has been adequately characterized by previous testing in the vicinity. As such, further project-specific testing of glacial till, including these 1,113,900 cubic yards, is not required.

In accordance with geological testing and assessment procedures set forth in a joint U.S. Environmental Protection Agency – Region 2 and U.S. Army Corps of Engineers – New York District standardized operating procedures, these 1,113,900 cubic yards are glacial till because the material (1) lacks detectible fossils or shells, (2) has a low organic carbon content, (3) has a reddish or red-brown color, (4) is comprised of a poorly sorted layer of clay particles, silts, sands, gravels and boulders, and (5) has a stratigraphic setting consistent with other Pleistocene age deposits in the vicinity of this Newark Bay Channel dredging area. A copy of the glacial till determination for this construction contract area may be requested from Mr. Monte Greges, Chief, Dredged Material Management Section, at telephone number (917) 790-8428.

Several areas of Pleistocene age glacial till in the vicinity of this proposed work were previously tested to determine suitability for use as Remediation Material at the HARS. This testing of glacial till was conducted in accordance with test protocols for ocean placement established by



February 25, 2010

Mr. Richard M. Larrabee
Director, Port Commerce Department
The Port Authority of New York and New Jersey
225 Park Avenue South
New York, NY 10003

RE: UTEX Facility Availability Notice

Dear Mr. Larrabee ,

Pursuant to Article 3 of the Agreement ("Agreement") between UTEX Holdings, LLC, TDM America, LLC (collectively "UTEX") and the Port Authority of New York and New Jersey ("Port Authority") entered into July 17, 2009, UTEX hereby advises the Port Authority of its capacity to accept Processed Dredge Material ("PDM").

In order to meet scheduling preferences for Port Authority related maintenance dredging activities, UTEX is designating two UTEX Facility Locations for compliance with its obligations and accommodating both marine or truck delivery of PDM. The facilities are identified as the UTEX/380 Facility [Staten Island, NY] and the UTEX/Bayshore Facility [Keasbey, NJ], with both facilities having existing agreements between UTEX and the property owners for the receipt, unloading, placement, storage and/or transload of PDM. UTEX anticipates that the UTEX/380 Facility will obtain necessary regulatory authorization in the near future but the fully permitted UTEX/Bayshore Facility will enable UTEX to accept PDM on or after March 1, 2010. We expect the regulatory approvals from the New York State Department of Environmental Conservation for the UTEX/380 Facility prior to the anticipated award of the Port Authority's next NJMT Maintenance Dredging Contract in June 2010. Nevertheless, if that doesn't occur UTEX will accept the PDM at its UTEX/Bayshore Facility.

Please let us know if we can be of further assistance.

Sincerely,

A handwritten signature in black ink that reads "Rick Redle". The signature is written in a cursive, slightly slanted style.

Rick Redle
Executive Vice President

RR/lf

UTEX Environmental Services, LLC.
4570 Westgerove Dr., Suite #240
Addison, TX. 75001
(972) 407 – 0701
(972) 407 – 0634: Fax

May 1, 2007

Mr. Herbert S. Somerwitz
225 Park Avenue South, 14th Floor
New York, NY. 10003

Mr. Somerwitz:

Herein I am forwarding 10 corrected copies of our Public Private Partnership Proposal.

Please note that page 17 has been changed due to an oversight from one of our previous drafts. Also, I have included six replacement pages so that you might correct the earlier copies that were sent.

During our conversation on Friday, April 27th, you asked for permission to distribute copies of the Public Private Partnership to the U.S. Army Corps of Engineers. With the following understanding, permission is granted:

that the material and information contained in this proposal is being provided to the Port Authority and its representatives and may be submitted to the USACE only for purposes of confidential discussions and meetings between the Port Authority and the USACE. The material and information and its contents not of public knowledge should therefore be treated as confidential settlement negotiations in accordance with Rule 408 of the Federal Rules of Evidence. The material and information is specifically not subject to discovery and/or admission in any pending or subsequent litigation involving (i) TDM America, LLC ("TDM"), UTEX Environmental Services, LLC ("UTEX") and/or any of its affiliates; and/or (ii) any patents or other intellectual property owned by TDM America, LLC, UTEX Environmental Services, LLC and/or any of its affiliates and/or successors in interest.

I appreciate your efforts and await the scheduling of our next meeting. Please feel free to call on me for intervening meetings with the Port Authority groups as they may become necessary.

Sincerely,



Ritchie G. Studer
Chief Executive Officer



April 23, 2007

Herbert Somerwitz
The Port Authority of NY & NJ
225 park Avenue South
14th Floor
New York, NY 10003

**RE: Draft Proposal and Development Plan for a Public Private Partnership
(PANYNJ)**

Dear Herb,

As we have discussed enclosed please find six (6) copies of our Draft Proposal for a Public Private Partnership. The draft proposal is marked confidential and further marked to exempt the proposal from public release. Please inform us if for any reason you feel the Port Authority can not comply with the marks.

The proposal is in draft form so we might receive your and other port authority department input prior to finalization. Please feel free to solicit the input of other groups within the PA as you deem necessary.

I am looking forward to seeing you on Friday and am anxious to move forward this process so we might both realize a net benefit from our efforts.

Thank You.

Sincerely,

A handwritten signature in black ink, appearing to read "Richie G. Studer". The signature is fluid and cursive.

Richie G. Studer
CEO
UTEX Environmental Services, LLC
4570 Westgrove Drive, Suite 240
Addison, TX 75001

Attachment:

Proposal and Development Plan for a Public Private Partnership

*****ALERT*****

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Memorandum

Date: 5/8/2009
To: Darrell Buchbinder, General Council
From: UTEX Holdings, LLC, TDM Holdings, LLC and Ritchie G. Studer
RE: Analysis of Cost for Processing and Upland Beneficial Use of Dredge Material and Proposal to Perform certain Beneficial Use Activities

The purpose of this memorandum is to evaluate the current cost for Processing and Upland Beneficial Use of Dredged Material from the Port District of New York and New Jersey. Also, the memorandum proposes a cost per cubic yard for the Port Authority of New York and New Jersey (PANYNJ) and UTEX Environmental Services, LLC (UTEX) agreements and identifies the new services provided by the UTEX agreements.

Analysis of Current Bid for Processing and Upland Beneficial Use for Dredged Material not suitable for HARS

To evaluate the cost for dredging, processing, transportation and upland beneficial use of dredged material that the PANYNJ and the United States Army Corp of Engineers (USACE) are currently experiencing, UTEX gathered the latest bid tabulations from current projects that were awarded within the New York Port District.

The projects utilized were:

1. Anchorage Channel (Used for Beach Nourishment)
2. Elizabeth Channel W912DS-09-B-0001
3. Arthur Kill W912DS-08-B-0006
4. Newark Bay W912DS-08-B-0009
5. Fresh Kill and Arthur Kill W912DS-09-B-0006

The average cost derived from these projects for Processing and Upland beneficial use only (see **Exhibit A**) was \$75.09 per cubic yard of dredged material processed and utilized for upland beneficial use.

Utilizing the "*Potential Dredged Material Storage Facilities and Their Impact on Public Processing Facility Economic Modeling Summary Report*" (*Summary Report*) dated June 2007, page 5, *Table 1, (which is attached)* UTEX has identified a series of values and ratios that are associated with various work activities for Processing and Upland Beneficial Use of

Dredged Material. From the report UTEX has identified the following "Scope of Work" and cost values for those activities:

Scope of Work

1. Processing Activities..... \$24.28
 - a. Infrastructure
 - b. Additive processing
 - c. Scow Fleet
2. PDM to Beneficial Use Site Activities,
Extra Cost to Deliver by Truck..... \$10.07*
(included in cost shown in PDM Tables 1 and 2)
3. Beneficial Use Activities..... \$19.14
 - a. Permitting
 - b. Preparing area
 - c. Unloading and Stockpiling Activities
 - d. Loading and Placement
 - e. Compaction to prevent erosion
 - f. Cover system
 - g. Tipping Fee

When evaluating the cost identified on *Table 1* of the *Summary Report* associated with the above described activities, UTEX noted the following costs and ratios of each activity compared to Total Cost:

PDM Table 1 – 2006 Data

Item	Scope of Work	Cost	Ratio
1	Processing Activities	\$24.28	45%
2	PDM Delivery to Beneficial Use Site (by truck*)	\$10.07*	19%
3	Beneficial Use Activities	\$19.14	36%
TOTAL COST		\$53.49**	100%

After applying the ratios from **PDM Table 1 – 2006 Data** to the average cost for the most recent processing and upland beneficial use bids that the PANYNJ and USACE have received in 2008 and 2009 of \$75.09 per cubic yard (see **Exhibit A – Latest Bid Data**), UTEX derived the following current costs per "Scope of Work" activity:

PDM Table 2 – Current Data

Item	Scope of Work	Cost	Ratio
1	Processing Activities	\$34.08	45%
2	PDM Delivery to Beneficial Use Site (by truck*)	\$14.14*	19%
3	Beneficial Use Activities	\$26.87	36%
TOTAL COST		\$75.09	100%

*This is the identified premium which is the extra cost for truck delivery of PDM to beneficial use site as compared to barge delivery.

** Cost estimated from data available in 2006

EXHIBIT A – Latest Bid List

Arthur Kill W912DS-08-B-0006 (dated 7/09/08)					143,535 cy
	Mob / Demob	Bid Range for Dredging, Processing and Placement / CY	Average of Bid for Dredging, Processing and Placement / CY	* Dredging Only Bid / CY	Average Processing and Placement bid / CY
Great Lakes	\$ 1,175,000**	\$ 75.00 - 125.00	\$ 100.37 (Weighted avg.)	\$ 12.95*	\$ 87.42 †
Newark Bay W912DS-08-B-0009 (dated 7/28/08)					302,507 cy
DonJon	\$ 1,600,000**	\$ 75.00 - 91.00	\$ 83.28 (Weighted avg.)	\$ 12.95*	\$ 70.33 †
Elizabeth Channel W912DS-09-B-0001 (dated 11/25/08)					192,000 cy
DonJon	\$4,500,000	\$71.00	\$71.00	\$12.95*	\$58.05 †
Fresh Kill and Arthur Kill W912DS-09-B-0006 (dated 4/15/09)					63,065 cy
Great Lakes	\$ 775,000**	\$90.00 -105.00	\$97.50 (Average)	\$12.95*	\$84.55 †
Average bid for processing and placement only	\$ 1,183,333** (\$6.97 cy)				\$ 75.09 †

* Dredging cost for maintenance dredging of sand for beach nourishment from Anchorage Channel Project utilizing Great Lakes winning bid dated 2008.

** Average of Mob/Demob for Maintenance Dredging only (divided by Average CY for same projects.) The Elizabeth Channel Mob/Demob bid was not used because the majority of this project included deepening.

† Average portion of bid for Processing and Upland beneficial use only

Only included is the winning bidder on both the latest Maintenance Dredging contracts and the latest Deepening contract that also includes upland upland beneficial use. Other bids for the referenced projects were 3% to 92% higher.

UTEX Holdings, LLC Proposal for Upland Beneficial Use of PDM

The cost that UTEX is proposing for *Item 3) Beneficial Use Activities*, which includes all the current Scope of Work as detailed above and the proposed Scope of Work as detailed below, is **\$24.50** per cubic yard (CY) for each cubic yard of PDM that is placed on UTEX controlled beneficial use sites.

Several additional site activities that UTEX is proposing that have not historically nor are not currently being addressed in the Scope of Work for projects are:

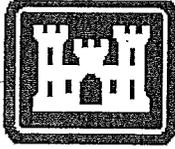
- Confirmatory testing (QA/QC) of PDM from the delivery location or stockpile
- Material Manifesting for PDM tracking
- GPS documentation of placement location of PDM
- Volume/weight verification of PDM received for beneficial use

Additional unquantified benefits that PANYNJ will enjoy after acceptance of the UTEX proposal are;

- PDM acceptance at the Beneficial Use Site, 24/7 each day of the year on an as needed basis.
- UTEX will provide a safe and secure site that assures the PANYNJ will not experience issues such as EnCap type problems.
- UTEX will provide “cradle to grave” documentation for PDM materials
- The PANYNJ will have control of how the processed materials are beneficially used.
- The acceptance of this proposal by PANYNJ establishes cost controls over the beneficial use portion of the Port District dredging activities for the next 15 years.
- The PANYNJ receives a cost savings compared to the average cost of the most recent bids.
- Stockpiling of PDM and confirmatory testing prior to putdown of material.

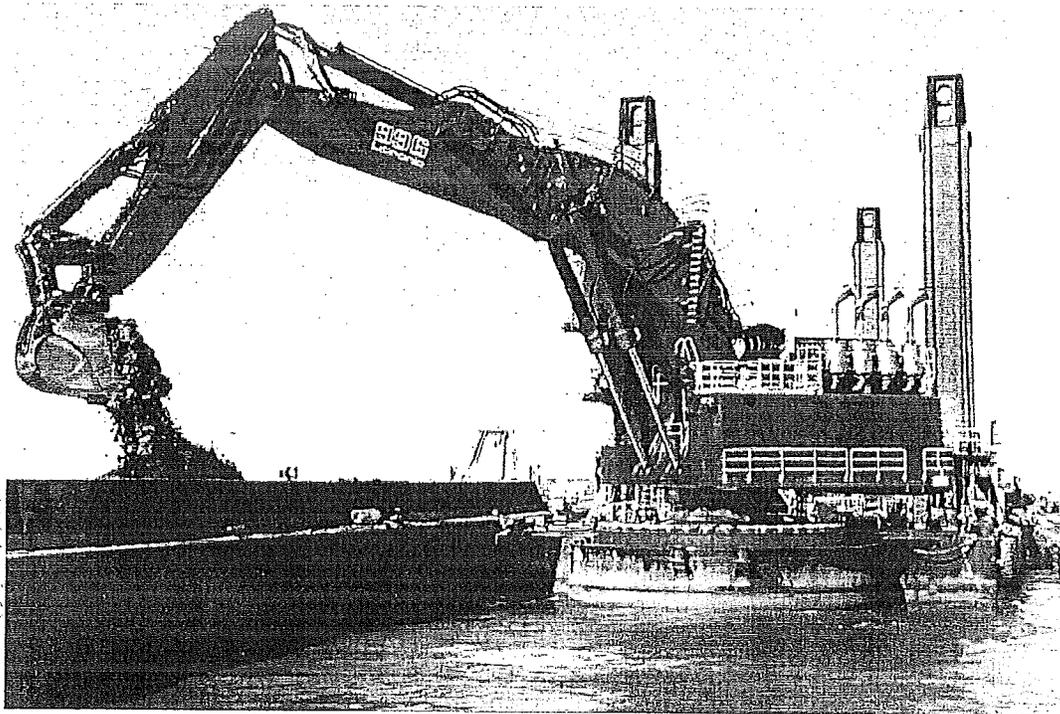
*****ALERT*****

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Port of New York and New Jersey
Feasibility Analysis for a Dredged Material
Public Processing Facility

Potential Dredged Material Storage Facilities and Their Impact on
Public Processing Facility Economic Modeling
Summary Report



June 2007

Prepared by: U.S. Army Corps of Engineers
New York District, Planning Division (CENAN-PL-E)
26 Federal Plaza
New York, New York 10278-0090

Table 1
 Optimum Model - March 2006 Report
 Estimated Costs¹
 Summary

Dredged Material Stabilized with Admixtures

Material Quantities

1,500,000 CY In Channel Material Dredged Annually
 7,634 CY Stabilized Material Processed Daily (FGSM - In-Barge)
 8,656 tons of FGSM Stabilized Material Produced, Loaded, and Transported Daily
 4,328 tons of Material by Truck
 4,328 tons of Material by Barge
 78 tons >4" Debris Removed for Landfill Disposal Daily

Component in Overall Processing and Transportation	Total Annual Costs	In Channel Material	Cost/CY of	% of Total
	\$	\$	Cost	Cost
Scow Fleet	\$ 5,253,466		3.50	8%
Addition of Stabilizing Agents to FGSM at Portside (In-Barge)	\$ 29,314,733		19.54	45%
Portside Facilities Infrastructure	\$ 1,860,968		1.24	3%
<i>20 acres needed for this facility²</i>		<i>1,500 feet of wharf space</i>		
<i>Loading, Transportation, and Placement by Truck</i>	\$ 17,900,850		23.87	28%
<i>Loading, Transportation, and Placement by Barge</i>	\$ 10,353,511		13.80	16%
Transportation (Including Loading, Unloading, and Placement) PLUS Tipping Fee	\$ 28,254,361		18.84	44%
Total	\$ 64,685,028		43.12	

¹ Screening level pricing for comparison only among alternatives.

² Cost of real estate not included.

Table 1
Optimum Model - March 2006 Report
Estimated Costs¹
Summary

Dredged Material Stabilized with Admixtures

Component	Capital or Infrastructure Costs w/o Contingency	Contingency 15% of Capital Costs	Annual Cost Recovery Capital (5 yr) & Infrastructure	Annual O & M Costs 5% of Capital Cost	Annual Operations Costs ² w/o G&A or Profit	Annual G&A 15% of Annual Cost	Profit/ Cost of Money 10% of Annual Cost	Tipping Fee	Total Annual Costs
Scow Fleet	\$ 14,445,000	\$ 2,166,750	\$ 3,322,350	\$ 830,588	\$ -	\$ 622,941	\$ 477,588	\$ -	\$ 5,253,466
Addition of Stabilizing Agents to FGSM at Portside (In-Barge)	\$ 6,819,191	\$ 1,022,879	\$ 1,568,414	\$ 392,103	\$ 21,213,185	\$ 3,476,055	\$ 2,664,976	\$ -	\$ 29,314,733
Portside Facilities Infrastructure	\$ 12,449,409	\$ 1,867,411	\$ 1,471,121	\$ -	\$ -	\$ 220,668	\$ 169,179	\$ -	\$ 1,860,968
Transportation (Including Loading, Unloading, and Placement) PLUS Tipping Fee	\$ 4,319,507	\$ 553,426	\$ 776,137	\$ 194,034	\$ 3,899,130	\$ 2,399,895	\$ 1,839,920	\$ 8,015,245	\$ 28,254,361
Total	\$ 38,033,106	\$ 5,610,466	\$ 7,138,021	\$ 1,416,725	\$ 25,112,315	\$ 6,719,559	\$ 5,151,662	\$ 8,015,245	\$ 64,683,528
Cost/CY in Channel Material			4.76	0.94	16.74	29.86	4.48	3.43	43.12
								5.34	

¹ Screening level pricing for comparison only among alternatives.

² Annual costs include capital (5 year) or infrastructure (10 year) cost recoveries, O&M, and facility operations.

Anchorage Channel (Used for Beach Nourishment)

4. ISSUING OFFICE
 CENAN-CT USACE NEW YORK DISTRICT
 NAME AND TITLE OF CERTIFYING OFFICIAL (TYPE)

5. PROJECT TITLE
 MAINTENANCE DREDGING PROJECT IN ANCHORAGE CHANNEL OF NY AND NJ HARBOR
 SIGNATURE
 DATE SIGNED

6. NUMBER OF AMENDMENTS ISSUED
 11

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. GOVERNMENT ESTIMATE (Check A, B or C and complete D, E, and F)			NO. 1		NO. 2	
			A. HIRED LABOR	D. UNIT PRICE	F. ESTIMATED AMOUNT	D. UNIT PRICE	E. ESTIMATED AMOUNT	D. UNIT PRICE	E. ESTIMATED AMOUNT
0001	Mobilization and Demobilization	1	<input type="checkbox"/>	LS	1,144,000				
0002	Trash and Debris Removal and Disposal	200	<input type="checkbox"/>	TON	50,000				
0003	Acceptance Area 1	369,500	<input type="checkbox"/>	CY	5,677,870				
0004	Additional Cost for Insurance	1		LS	50,000				
	Total Base				6,976,870				
0005AA	Option 1A: Acceptance Area 4 (Utility Center Area)	6,000		CY	25.88				
0005AB	Option 1B: Acceptance Area 4 (Utility)	12,000		CY	34.51				
0006	Option 2: Acceptance Area 4	12,000		CY	78.63				
0007	Option 3A: Acceptance Area 2	217,000		CY	26.14				
0008	Option 3B: All Work Asso. With ELD	1		LS	3,244,952				
0009	Option 4A: Acceptance Area 1 (D.H. 003)	1,000		CY	9.88				
0010	Option 4B: Mobilization and Demobilization	1		LS	1,222,500				
0011	Option 5A: Acceptance Area 2 (D.H. 007)	1,000		CY	55.71				

7. OFFERS
 A. OFFEROR: Crest Tanks
 B. OFFEROR: Woods Marine
 C. AMENDMENTS ACKNOWLEDGED
 D. UNIT PRICE
 E. ESTIMATED AMOUNT

8. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				5,445,000
				2,000,000
				11,377,550
				0
				17,572,550
				720,000
				2,400,000
				840,000
				21,945,000
				1,000,000
				2,400,000

9. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,220,000
				100,000
				4,707,375
				1,200
				7,028,585
				3750
				68.75
				875,000
				540,000
				8,951,250
				16,885,000
				125,000
				84,000
				352,000

10. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

11. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

12. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

13. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

14. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

15. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

16. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

17. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

18. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

19. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

20. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

21. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

22. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

23. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

24. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

25. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

26. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

27. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

28. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

29. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

30. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

31. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

32. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

33. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

34. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

35. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

36. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

37. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

38. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

39. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

40. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

41. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

42. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

43. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

44. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

45. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

46. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

47. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

48. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

49. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

50. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

51. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

52. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

53. AMENDMENTS ACKNOWLEDGED

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT
				2,400,000

54. AMENDMENTS ACKNOWLEDGED

Arthur Kill W912DS-08-B-0006

4. ISSUING OFFICE: CENAN- CT USA CE New York District
 NAME AND TITLE OF CERTIFYING OFFICIAL (TYPE): WEI LUGLIN
 Contract Specialist
 SIGNATURE: [Signature]
 DATE SIGNED: 7/9/08

5. PROJECT TITLE: DREDGING- ARUTHER KILL - NEW YORK/NEW JERSEY
 D. GOVERNMENT ESTIMATE (Check A, B or C and complete D, E, and F)
 A. HIRED LABOR
 D. REASONABLE CONTRACT (Without Profit)
 C. REASONABLE CONTRACT (Including Profit)

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	6. NUMBER OF AMENDMENTS ISSUED			5. AMENDMENTS ACKNOWLEDGED			5. AMENDMENTS ACKNOWLEDGED		
			D. UNIT	E. UNIT PRICE	F. ESTIMATED AMOUNT	D. UNIT PRICE	E. ESTIMATED AMOUNT	D. OFFEROR	E. ESTIMATED AMOUNT	D. OFFEROR	E. ESTIMATED AMOUNT
0001	MOBILIZATION /DEMOB	1	LS	\$1,734,490	\$1,734,490	\$1,175,000	\$1,175,000	CASHMAN DREDS AND MARINE	\$2,850,000	\$2,850,000	
0002	DREDGING BASIC WORK	27,270	CY	\$72.04	\$1,964,530.80	\$82.00	\$2,236,140		\$140.00	\$4,035,960	
0003	OPTION #1	12,845	CY	\$73.62	\$945,648.90	\$108.00	\$1,387,260		\$274.00	\$3,519,530	
0004	OPTION #2	14,720	CY	\$72.78	\$1,071,321.60	\$75.00	\$1,104,000		\$157.00	\$2,311,040	
0005	OPTION #3	18,900	CY	\$72.50	\$1,376,050.00	\$100.00	\$2,049,840		\$163.00	\$3,093,740	
0006	OPTION #4	11,600	CY	\$74.73	\$859,395.00	\$75.00	\$862,500		\$133.00	\$1,529,500	
0007	OPTION #5	18,600	CY	\$72.87	\$1,361,211.60	\$85.00	\$1,587,000		\$177.00	\$3,306,360	
0008	OPTION #6	1	LS		\$275,000.00	\$75,000	\$75,000		\$140,000	\$140,000	
0009	OPTION #7	27,825	CY	\$71.29	\$1,962,257.25	\$90.00	\$2,724,975		\$191.00	\$5,257,275	
0010	NOT USED										
0011	OPTION #8	5,905	CY	\$76.46	\$451,496.30	\$125.00	\$738,125		\$131.00	\$773,555	
0012	NOT USED										
0013	OPTION #9	4,535	CY	\$79.26	\$359,444.10	\$110.00	\$498,850		\$154.00	\$699,390	

145,535

ABSTRACT OF OFFERS - CONSTRUCTION
 CONTINUATION SHEET

INSTRUCTIONS - Attach this form to OF 1419, Abstract of Offers - Construction, when more than 2 offers are received on a construction project. Each Continuation Sheet will accommodate 14 contract items to conform to the number of items which can be entered on the OF 1419. Use additional OF 1410's for contract items in excess of 14 and attach additional Continuation Sheets (OF 1410A) as needed.

2. PROJECT TITLE		4. OFFERS (Continued)				
DREDGE ARTHUR KILL, NY 84NJ		NO.:	NO.:	NO.:	NO.:	
		A. OFFEROR	A. OFFEROR	A. OFFEROR	A. OFFEROR	
		DONJON MARINE				
		B. BID SECURITY (Type and Amount)				
		C. AMENDMENTS ACKNOWLEDGED	C. AMENDMENTS ACKNOWLEDGED	C. AMENDMENTS ACKNOWLEDGED	C. AMENDMENTS ACKNOWLEDGED	
		5				
		D. UNIT PRICE	D. UNIT PRICE	D. UNIT PRICE	D. UNIT PRICE	
		E. ESTIMATED AMOUNT	E. ESTIMATED AMOUNT	E. ESTIMATED AMOUNT	E. ESTIMATED AMOUNT	
		D. UNIT PRICE	D. UNIT PRICE	D. UNIT PRICE	D. UNIT PRICE	
		E. ESTIMATED AMOUNT	E. ESTIMATED AMOUNT	E. ESTIMATED AMOUNT	E. ESTIMATED AMOUNT	
0001	1	LS	\$1,600,000	\$1,600,000		
0002	27270	CY	\$106.00	\$2,890,620		
0003	12,845	CY	\$103.00	\$1,323,035		
0004	14,720	CY	\$102.00	\$1,501,440		
0005	18,900	CY	\$100.00	\$1,890,000		
0006	11,500	CY	\$100.00	\$1,150,000		
0007	18,600	CY	\$106.00	\$1,960,000		
0008	1	LS	\$300,000	\$300,000		
0009	27,525	CY	\$70.00	\$1,926,750		
0010	NOT USED					
0011	5,905	CY	\$75.00	\$442,875		
0012	NOT USED					
0013	4,535	CY	\$75.00	\$340,125		

Newark Bay W912DS-08-B-0009

NAME AND TITLE OF CERTIFYING OFFICIAL (TYPE)
W. Leggin
DATE SIGNED
7/28/08

I CERTIFY that I have opened, read, and recorded on this abstract all offers received in response to this solicitation.

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	8. GOVERNMENT ESTIMATE (Check A, B or C and complete D, E, and F)			9. OFFERS		E. ESTIMATED AMOUNT	D. UNIT PRICE	E. ESTIMATED AMOUNT
			A. HIRED LABOR	B. REASONABLE CONTRACT (Without Profit)	C. REASONABLE CONTRACT (Including Profit)	NO. 1	NO. 2			
0001	Mobilization and Demobilization	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	600,000	600,000	3,600,000	3,600,000	3,600,000
0002	Dredging Processing Transportation	49,110	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	89 ⁷³	4,406,640 ³⁰	5,647,650	118.50	5,819,535
0003	OPTION NO. 1	72,370	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	89 ¹⁰⁷	6,460,967 ³²	7,960,700	127	9,190,990
0004	OPTION NO. 2	42,752	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	89 ²³	4,079,595 ⁶	5,029,200	125	5,715,000
0005	OPTION NO. 3	11,150	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	103 ⁸⁹	1,158,262	1,449,500	125	1,393,750
0006	OPTION NO. 4	53,020	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	90 ⁶⁵	4,806,263	6,097,300	125	6,627,500
0007	OPTION NO. 5	74,105	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	89 ³²	4,622,763 ⁸⁵	8,522,075	125	9,263,125
0011	GPARI/CASS	NSP								
	TOTAL BASE							6,247,650		9,419,535
	TOTAL OPTIONS							29,058,775		32,190,365
	TOTAL BASE PLUS OPTIONS							35,306,425		41,609,900

ABSTRACT OF OFFERS - CONSTRUCTION
CONTINUATION SHEET

INSTRUCTIONS - Attach this form to OF 1419, Abstract of Offers - Construction, when more than 2 offers are received on a construction project. Each Continuation Sheet will accommodate 14 contract items to conform to the number of items which can be entered on the OF 1419. Use additional OF 1419's for contract items in excess of 14 and attach additional Continuation Sheets (OF 1419A) as needed.

3. CONTRACT ITEMS			4. OFFERS (Continued)	
A. ITEM NO.	B. ESTIMATED QUANTITY	C. UNIT	NO.:	
			A. OFFEROR	NO.:
C. AMENDMENTS ACKNOWLEDGED			C. AMENDMENTS ACKNOWLEDGED	
D. UNIT PRICE			D. UNIT PRICE	
E. ESTIMATED AMOUNT			E. ESTIMATED AMOUNT	
0001	1		1,600,000	1,600,000
0002	49,110		91	4,469,010
0003	72,370		86	6,223,820
0004	42,752		75	3,429,000
0005	11,150		95	1,059,250
0006	53,020		84	4,453,680
0007	74,105		75	5,557,875
0011	NSP			
Total Base				6,069,010
Total Options				20,723,625
Total Base plus options				26,792,635

MAINTENANCE DREDGING ~~NEWARK BAY~~
NEWARK BAY, NEW JERSEY, FEDERAL NAVIGATION PROJECT

Don Jan Marie
B. BID SECURITY (Type and Amount)

Elizabeth Channel W912DS-09-B-0001

ABSTRACT OF OFFERS - CONSTRUCTION

4. ISSUING OFFICE
CT-N-CT

26 FEDERAL PLAZA, NEW YORK, NY 10278

5. PROJECT TITLE

New York and New Jersey Channel Navigation Improvement 50ft. Project Elizabeth Channel

F. NUMBER OF AMENDMENTS ISSUED
5

7A. ITEM NO.	7B. DESCRIPTION OF OFFERED ITEM	7C. EST. QUANTITY	D. UNIT PRICE	E. ESTIMATED AMOUNT	F. ESTIMATED AMOUNT (Including Profit)	D. UNIT PRICE	E. ESTIMATED AMOUNT	D. UNIT PRICE	E. ESTIMATED AMOUNT
0001	Mobilization and Demobilization	1	LS	2,658,882		200	2,325,000		1,020,000
0002	Debris Removal and Disposal	300	TON	63,153		200	60,000	200	60,000
0003	Dredging, Transportation, Delivery	192,000	CY	13,781,760		72.50	13,920,000	70	130,440,000
0004	Dewatering in Accordance with	192,000	CY	213,120		1.00	192,000	1.50	288,000
0005	Additional Cost for Insurance	1	LS	1,100		100	100	1	1
0006	Dredging, Transportation, Delivery	309,000	CY	13,963,340		26	21,034,000	37	29,933,000
0007	Opt. 1 Subsurface Drilling and Sampling	15	EA	53,500		4,500	67,500	3,800	57,000
0008	CPARS/CCASS		NSP	NSP		NSP	NSP	NSP	NSP
	TOTAL BASE			30,681,355			37,531,100		53,741,001
	TOTAL OPTIONS			55,500			67,500		57,000
	TOTAL BASE PLUS ALL OPTIONS			30,736,855			37,598,600		53,798,001

NSN 7540-07-150-0901

501419-101

NOTE: If more than two offers are received, continue on OF 1419A.

OPTIONAL FORM 1419 (11-88)
Prescribed by GSA - FAR (40 CFR) 53.236-1

1. SOLICITATION NUMBER
W912DS-09-B-0001

I CERTIFY that I have opened, read, and recorded on this abstract all offers received in response to this solicitation.

2. DATE ISSUED
16 October 2008

3. DATE OPENED
25 November 2008

NAME AND TITLE OF CERTIFYING OFFICIAL (TYPE)
Jason L. Parker
Contract Specialist

4. ISSUING OFFICE
CT-N-CT

5. PROJECT TITLE
New York and New Jersey Channel Navigation Improvement 50ft. Project Elizabeth Channel

6. NUMBER OF AMENDMENTS ISSUED
5

7. DATE ISSUED
16 October 2008

8. DATE OPENED
25 November 2008

NAME AND TITLE OF CERTIFYING OFFICIAL (TYPE)
Jason L. Parker
Contract Specialist

SIGNATURE
Jason L. Parker

DATE SIGNED
11-25-08

9. OFFERS

A. OFFEROR
Great Lakes

B. OFFEROR
Cashman

C. AMENDMENTS ACKNOWLEDGED
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D. AMENDMENTS ACKNOWLEDGED
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D. UNIT PRICE

E. ESTIMATED AMOUNT

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ABSTRACT OF OFFERS - CONSTRUCTION CONTINUATION SHEET

INSTRUCTIONS - Attach this form to OF 1419. Abstract of Offers - Construction, when more than 2 offers are received on a construction project. Each Continuation Sheet will accommodate 14 contract items to conform to the number of items which can be entered on the OF 1419. Use additional OF 1419's for contract items in excess of 14 and attach additional Continuation Sheets (OF 1419A) as needed.

2. PROJECT TITLE		NO.:		NO.:		NO.:	
New York and New Jersey Channel Navigation Improvement 50ft. Project Elizabeth Channel		A. OFFEROR	A. OFFEROR	A. OFFEROR	A. OFFEROR	A. OFFEROR	A. OFFEROR
		B. BID SECURITY (Type and Amount)		B. BID SECURITY (Type and Amount)		B. BID SECURITY (Type and Amount)	
		C. AMENDMENTS ACKNOWLEDGED		C. AMENDMENTS ACKNOWLEDGED		C. AMENDMENTS ACKNOWLEDGED	
3. CONTRACT ITEMS		D. UNIT PRICE	E. ESTIMATED AMOUNT	D. UNIT PRICE	E. ESTIMATED AMOUNT	D. UNIT PRICE	E. ESTIMATED AMOUNT
A. ITEM NO.	B. ESTIMATED QUANTITY	C. UNIT	D. UNIT PRICE	E. ESTIMATED AMOUNT	D. UNIT PRICE	E. ESTIMATED AMOUNT	D. UNIT PRICE
0001	1	LS		4,500,000			
0002	300	TON	200	60,000			
0003	192,000	CY	70	13,440,000			
0004	192,000	CY	1	192,000			
0005	1	LS	0	0			
0006	809,000	CY	17	13,753,000			
0007	15	EA	3,200	48,000			
0008		NSP	NSP	NSP			
TOTAL BASE				31,945,000			
TOTAL OPTIONS				48,000			
TOTAL BASE				31,993,000			
				①			

This procurement is: **UNRESTRICTED**
Recorded by: **Albert Rump 11/25/08**

Fresh Kill and Arthur Kill W912DS-09-B-0006

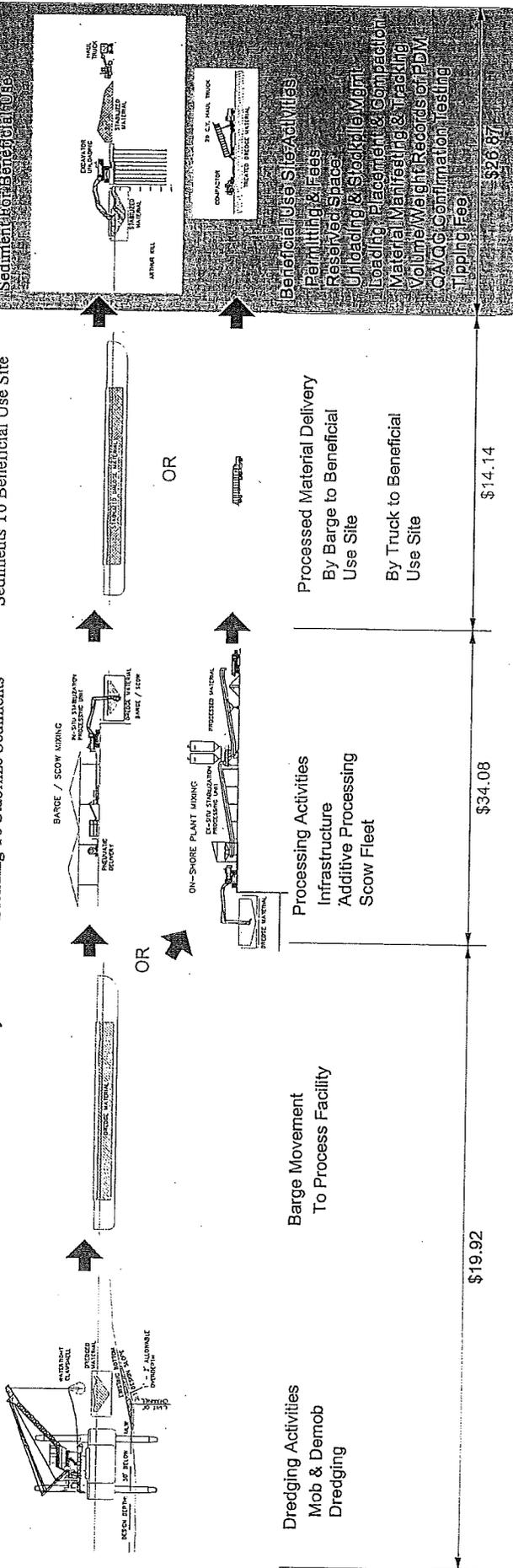
Port District Dredging Activities, With Recent Bid Pricing Analysis

Federal Channel & Port Berth Dredging For Maintenance or Deepening

Movement of Raw Dredged Sediment To Process Facility

Process Facility For Additive Blending To Stabilize Sediments

Delivery Of Processed Dredged Sediments To Beneficial Use Site



\$19.92

\$34.08

\$14.14

\$26.87

	Mo/Demob	Range for Dredging, Processing & Placement / Cy	Average Bid / Cy	Average* Bid Dredging Only / Cy	Average Processing & Upland Placement / Cy
ARTHUR KILL Maintenance (7/02/2008)	\$1,175,000	\$75.00 - 125.00	\$100.37	\$12.95*	143,535 Cy
Great Lakes (low bid)					587.42
NEWARK BAY Maintenance (7/20/2009)	\$1,600,000	\$75.00 - 91.00	\$83.28	\$12.95*	302,507 Cy
Donjon Marine (low bid)					\$70.33
ELIZABETH CHANNEL Deepening (11/25/2008)	\$4,500,000	\$71.00	\$71.00	\$12.95*	192,000 Cy Study for Upstart
Donjon Marine (low bid)					\$68.05
ARTHUR KILL Maintenance - Fresh Kills Reach (4/15/2009)	\$775,000	\$90.00 - 105.00	\$97.50	\$12.95*	63,065 Cy
Great Lakes (low bid)					\$84.55
Average	\$1,193,333		\$88.04	\$12.95	\$75.09
	\$6,277.75				

*Reference cost for maintenance dredging of sand for beach nourishment from Arthur Kill Channel Project using Great Lakes Mining Ltd, 2008.

CA/PANYNJ/Tech003-sec4/2007.dwg
 PLOT SHEET: PDM Activities-Recent Bid Pricing Analysis
 11 x 17 PLOT SCALE:
 MAY 1, 2009

July 2008: ⇒ UTEX will be to
 Do all this for \$41.00
 34.08
 14.14
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In the United States Court of Federal Claims

No. 06-472C

(Filed: February 20, 2009)

***** *	
TDM AMERICA, LLC,	*
	*
Plaintiff,	*
	*
v.	*
	* Patent Infringement Case; <u>Markman</u>
THE UNITED STATES,	* Claim Construction Proceedings;
	* Patents Relating to Processing and
Defendant,	* Treatment of Contaminated
	* Materials for Beneficial Reuse.
and	*
	*
DONJON MARINE COMPANY, INC.,	*
	*
Third-Party Defendant.	*
	*
***** *	

David W. Denenberg, with whom was *Michael A. Adler*, Davidoff Malito & Hatcher LLP, New York, New York, for Plaintiff.

Walter W. Brown, with whom were *Gregory G. Katsas*, Acting Assistant Attorney General, and *John J. Fargo*, Director, United States Department of Justice, Commercial Litigation Branch, Civil Division, Washington, D.C., and *Joshua B. Brady*, Of Counsel, for Defendant.

Gary J. Campbell, with whom was *John E. Flaherty*, McCarter & English LLP, Boston, Massachusetts, for Third-Party Defendant.

OPINION AND ORDER

WHEELER, Judge.

In this patent case, Plaintiff TDM America, LLC (“TDM”) claims that the United States Army Corps of Engineers (“USACE”) and other federal agencies, through their contractors, infringed three patents owned by TDM for the processing and treatment of contaminated materials for beneficial reuse. The patents at issue are U.S. Patent Nos. 5,542,614 (“the ‘614 Patent”), 5,794,862 (“the ‘862 Patent”) and, 6,293,731 (“the ‘731 Patent”). Third-Party Defendant Donjon Marine Company, Inc. (“Donjon”) represents one of the contractors hired by USACE to perform cleanup work at these processing and treatment sites.

The Court possesses subject matter jurisdiction over this case in accordance with the following statutory provision:

Whenever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, the owner's remedy shall be by action against the United States in the United States Court of Federal Claims for the recovery of his reasonable and entire compensation for such use and manufacture

For the purposes of this section, the use or manufacture of an invention described in and covered by a patent of the United States by a contractor, a subcontractor, or any person, firm, or corporation for the Government and with the authorization or consent of the Government, shall be construed as use or manufacture for the United States.

28 U.S.C. § 1498(a) (2006). Because DonJon is a contractor for the United States, DonJon's alleged use of the patented methods qualifies as "use . . . for the United States." *Id.* Therefore, DonJon is immune from suit by the patent owners, except "by action against the United States in the United States Court of Federal Claims" if two criteria are met: (1) the use is "for the Government," and (2) the use is "with the authorization or consent of the Government." *Id.*; Hughes Aircraft Co. v. United States, 534 F.2d 889, 897-98 (Ct. Cl. 1976).

The Court's analysis in a patent infringement case involves two steps. See Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 807, 812 (Fed. Cir. 2002); Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1581-82 (Fed. Cir. 1996). The first step is to determine the scope and meaning of the patents in a Markman claim construction hearing. See Markman v. Westview Instruments, Inc., 517 U.S. 370, 388-89 (1996); Gen. Am. Transp. Corp. v. Cryo-Trans., Inc., 93 F.3d 766, 769 (Fed. Cir. 1996), rehearing denied, (1996), cert. denied, 520 U.S. 1155 (1997). "Claim construction" is a question of law for the Court to decide. Markman, 517 U.S. at 388-91; Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1456 (Fed. Cir. 1998) (en banc). A patent's "claims" define the invention. Autogiro Co. of Am. v. United States, 384 F.2d 391, 395-96 (Ct. Cl. 1967). The claims are the numbered paragraphs "particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112 (2006). The Court must look to the wording of the claims to determine the scope and meaning of the patent. Autogiro Co., 384 F.2d at 395-96. In the second step, the patent claims as construed by the Court are compared to the accused device or method to determine alleged patent infringement. See Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co., 520 U.S. 17, 29 (1997). Those determinations are questions of fact. Bai v. L&L Wings, Inc., 160 F.3d 1350, 1353 (Fed. Cir. 1998) (citation omitted).

This opinion concerns the Markman "claim construction" phase of this case. TDM has presented for the Court's determination seven claims from the three patents at issue. The law provides that a claim may be either "independent" or "dependent." 35 U.S.C. § 112. An independent claim stands on its own as stated in a single claim, while a dependent claim refers to and adds a further limitation upon a previously stated claim. *Id.*; Honeywell Int'l Inc. v. Hamilton

Sundstrand Corp., 370 F.3d 1131, 1149 (Fed. Cir. 2004) (citation omitted). In this case, of the seven presented claims, three are independent claims and four are dependent claims. Most of the disputed terms are from the independent claims. Some of the disputed terms are common to more than one claim.

On October 10, 2008, the parties submitted a joint claim construction statement, setting forth the interpretation of terms on which they agree and disagree.¹ The parties filed opening claim construction briefs on November 14, 2008 and reply briefs on December 19, 2008. The Court conducted a Markman hearing on January 8, 2009 in which counsel for the parties participated in oral argument and provided supplemental written presentations.

For the reasons explained below, the Court adopts the Government's interpretation on the majority of the claim construction issues. Both parties have generally performed a comprehensive and well-supported analysis of the disputed claim terms. For the most part, the parties' interpretations of the disputed terms are properly based upon the intrinsic evidence within the patents, such as the claim language, the specifications, the prosecution history, and the drawings. However, TDM's interpretations appear, at times, to stretch the "ordinary meaning" of the disputed terms. It is a longstanding principle of claim construction that the words of a claim must be given their ordinary and customary meaning. Phillips v. AWH, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc) (citations omitted). The ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of invention. *Id.* at 1313 (citations omitted). In several instances, the Court finds that TDM's definitions ignore the plain claim language, overstate the breadth of the specification disclosures, or misstate limiting arguments made in the prosecution history. Accordingly, the Court agrees with Defendant's proposed claim constructions more often than Plaintiff's.

In the opinion that follows, the Court will address each of the disputed claim terms, providing the claim construction rationale deemed persuasive in each instance.

¹ In the parties' initial joint claim construction statement, filed October 10, 2008, TDM presented four patents for the Court's determination. TDM subsequently filed a stipulation on October 29, 2008 stating that it would not pursue an infringement claim against the Government related to the fourth patent.

Factual Background²

A. Dredging of United States Waterways

Federal, state, and local authorities are responsible for maintaining and improving the nation's waterways for navigation.³ (See PX 1 at A14, col. 1, lines 18-29). The navigability of these waterways is critical to American commerce and national security. See id. Each year, however, waste material such as silt and other sediments build up in the channels, causing them to become shallow and inaccessible to commercial vessels. Id. at A14, col. 1, lines 34-42. These waste materials are often contaminated with pollutants, typically as a result of industrial practices. Id. at A14, col. 1, lines 58-66. Dredging these materials from our waterways is necessary to maintain depth for commercial and military vessels. Id. at A14, col. 1, lines 34-42.

To that end, USACE employs contractors to remove and process contaminated materials from navigation channels throughout the United States. TDM owns patents for the processing and treatment of dredged materials. TDM's patents include U.S. Patent No. 5,542,614, issued August 6, 1996, entitled "Processing of Waste Material;" U.S. Patent No. 5,794,862, issued August 18, 1998, also entitled "Processing of Waste Material;" and U.S. Patent No. 6,293,731, issued September 25, 2001, entitled "Method for Treatment for Dredged Materials to Form a Structural Fill." The patents-in-suit claim different methods for treating waste material, such as contaminated dredged materials, with an additive to stabilize and solidify such material for beneficial reuse. (Pl.'s Brief at 13). These methods are generally directed to in-situ and land-based techniques for solidifying and stabilizing waste materials with an additive so that the treated end product can be beneficially reused and disposed of upland in an environmentally safe manner. Id.

B. The '614 Patent

The '614 Patent recites methods of treating waste material in a land-based apparatus. Id. Before the waste material arrives at the land-based apparatus, or pugmill, it goes through a vibrating screen to remove larger pieces of waste material and allow smaller pieces to accumulate. (PX 2). When a certain amount of waste material is accumulated, an additive is added and mixed with the waste material to form a homogenous mixture, which then drops to the process terminus. Id. at A28, col. 3, lines 34-39.

The '614 Patent issued from U.S. Patent No. 193,449 ("the '449 Application"), filed on February 8, 1994. (Def.'s Brief at 32). The prosecution of this patent was brief. The Patent Examiner first rejected all of the applicant's claims as obvious or not defined over two prior art

² The facts set forth in this opinion do not constitute findings of fact by the Court. The facts cited are either undisputed, or accepted by the Court after considering the allegations and evidence submitted by the parties.

³ In this opinion, the Court will refer to the parties' exhibits as "PX ___" for Plaintiff's exhibits, and "DX ___" for Defendant's exhibits. For multi-page exhibits, the Court has included citations to page numbers or to the parties' Bates numbers used during this case.

patents: U.S. Patent Nos. 5,007,590 (“the Taylor Patent”) and 5,028,010 (“the Sansing Patent”). *Id.* Both of these prior art patents are incorporated by reference into the ‘614 Patent specifications, and both are owned by TDM. (DX 20 at A835; DX 2 at A 27, col. 1, lines 11-13).

Following the Patent Examiner’s rejection of the claims, on December 2, 1994 the patent applicant submitted a responsive amendment distinguishing the Taylor and Sansing Patents, in part, by arguing that the Taylor Patent failed to “teach or suggest the processing steps involving a vibrating screen box.” (DX 21 at A853). The applicant also amended many of his independent claims to recite a “vibrating screen box,” or, alternatively, a “vibrating screen box having a slightly sloped mesh bottom and having openings of a desired size.” *E.g., id.* at A841, A843-44, A847. The applicant argued that the claimed invention’s step of “remov[ing] all large lumps of waste material completely from the process by requiring the waste material to pass through a vibrating screen having openings of a predetermined size” did not exist in prior art. *Id.* at A851.

Despite the applicant’s arguments, the Patent Examiner rejected some of the pending claims in a subsequent office action, citing U.S. Patent No. 4,812,205 (“the Silveri Patent”). (DX 22 at A861). The Patent Examiner explained that the applicant’s claims called for using a “vibrating screen,” just as the Silveri Patent did. *Id.* However, the cited disclosure of the patent actually states that “[t]he first disk screen 54 includes rotating radially interfering disks 56 that have preset gaps that are constructed so that abrasive containments . . . pass through the preset gaps and fall . . .” and does not include the term “vibrating.” (DX 23 at A870, col. 4, lines 17-22). The Patent Examiner did allow six claims over the prior art of record, all of which included a “vibrating screen box” limitation. (See DX 22 at A862). These claims issued as claims 1 through 6 of the ‘614 Patent. (DX 2 at A28).

C. The ‘862 Patent

The ‘862 Patent is a continuation of the ‘614 Patent but differs in that it does not include the added step of homogenizing the dredged material after screening and before accumulating it in a mixer. (See PX 3 at A37, col. 4, lines 21-28). Instead, it combines the homogenizing and mixing steps, both of which occur in the mixer. *Id.* at A.37, col. 4, lines 31-32. The prosecution history of the ‘862 Patent is likewise brief. The patent issued from U.S. Patent Application No. 541,132 (“the ‘132 Application”). (Def.’s Brief at 47). During the prosecution of the ‘132 Application, the patent applicant amended one claim that had been rejected in the ‘449 Application and added six additional claims. *Id.* All of the claims included the same “vibrating screen box” limitation permitted in the ‘614 Patent claims and were issued without further amendment. (See DX 29 at A910-14).

D. The ‘731 Patent

The ‘731 Patent provides a method for treatment of dredged material that is cost-effective on a large scale, environmentally sound, and creates a mixture that is suitable for beneficial reuse as a structural fill. (PX 1 at A14, col. 2, lines 48-52). The process generally involves depositing dredged material into a treatment vessel, dewatering the dredged material, mixing the dredged material with an additive in the treatment vessel, and allowing the mixture to cure for reuse as structural fill material, thereby reducing particulate emissions. *Id.* at A14, col. 2, line 53-67; A15,

col. 3, lines 1-5. Unlike the '614 and '862 Patents, the '731 Patent contemplates treatment of dredged material directly in a waterborne vessel, such as a barge or scow. See id. at A14, col. 2, lines 56-60.

The '731 Patent issued from U.S. Patent Application No. 09/080,062 ("the '062 Application"), which the patent applicant filed on May 15, 1998. (Def.'s Brief at 10). The '062 Application claimed a method for creating a substantially homogenous mixture of additive and dewatered dredged material and letting the mixture cure, thereby producing a structural fill material. (See DX 4 at A74-86). The Patent Examiner three times rejected all of the claims in the application on the grounds that they were obvious or not defined over prior art. (Def.'s Brief at 12). In so doing, the Patent Examiner relied on three existing patents: U.S. Patent No. 5,868,940 ("the Gurfinkel Patent"), U.S. Patent No. 4,539,121 ("the Kapland Patent"), and U.S. Patent No. 4,465,518 ("the Miyoshi Patent"). Id.

In the first office action, dated September 21, 1999, the Patent Examiner rejected all pending claims. Id. He noted that the Gurfinkel Patent disclosed a method for remediation of contaminated sediments dredged from a waterway that called for obtaining the dredged materials, separating them into a coarse fraction/debris and a fine fraction, removing water from the fine fraction, and mixing dry additives into the material. (DX 4 at A118). The Patent Examiner also explained that the Miyoshi Patent disclosed the use of Portland cement as a treatment additive in conjunction with blast furnace slag. Id. at A119. In response, the patent applicant argued that the cited prior art resulted "in a material with a compressive strength suitable for bricks or concrete," but the present invention results in a material suitable for "stabilization material or capping landfills." (PX 9 at TDM000118).

In the second office action, dated May 24, 2000, the Patent Examiner again rejected all claims, citing the Kapland and Miyoshi Patents. (DX 4 at A185-92). He concluded that the Kapland Patent covered every element of the applicant's pending claims, including obtaining dredged material, dewatering dredged material, mixing additive with the dredged material, curing/basifying the mixture, and maintaining the mixture in a substantially quiescent state for a period of time to stabilize the sludge and produce "a sedentary mass having load supportive properties/structural fill material . . ." Id. at A187-88; PX 9 at TDM000124-27. The Patent Examiner also maintained that the Kapland and Miyoshi Patents made it obvious to use Portland cement to increase compressive strength. (DX 4 at A189).

In response, the patent applicant canceled several claims and amended nearly all of the rest. Id. at A202-15. For example, the applicant amended claim 3 of the '062 Application to include the terms "structural fill" and "curing," both of which appear in the final language as issued in claim 1. Id. at A203. The applicant also disputed the Patent Examiner's characterization of the "basifying" step called for in the Kapland Patent as synonymous with "curing." Id. at A210-11. According to the applicant, "curing" is the technical term for perfecting through chemical change, whereas "basifying" does not indicate a chemical change. Id. at A210. The applicant argued that the Kapland Patent was not a chemical reaction because it did not mention "solving the problem of the fines of the dredged materials drying out and blowing away as dust." Id.

In a third office action, dated December 19, 2000, the Patent Examiner again rejected all claims as unpatentable over the Kapland Patent. Id. at 218. The Patent Examiner agreed that Kapland did not disclose the step of “curing the mixture” but found that reciting such a step would have been obvious to one of skill in the art. Id. at A219. He also stated that “it would have been obvious to one of ordinary skill . . . to provide the Portland cement as an additional agent as taught by Miyoshi . . . to the additive of Kapland . . . in order to enhance the comprehensive strength of the mixture.” Id. at A221.

Following the final rejection, the Patent Examiner conducted an interview with the patent applicant on April 9, 2001, for which the applicant submitted informal claim amendments. Id. at A229-39. The applicant proposed amending application claim 3, ultimately issued as claim 1, to recite the following additional limitations: “depositing the dredged material into a first vessel,” “creating an additive slurry in a second vessel,” “moving the additive slurry from the second vessel to the first vessel,” and reducing “particulate emissions” as a result of curing the mixture of additive slurry and dredged material. Id. at A234. The Patent Examiner rejected the proposed amendments. Id. at A228. With respect to the limitations of “creating an additive slurry in a second vessel” and “moving the additive slurry from the second vessel to the first vessel,” the Patent Examiner stated that “the method of creating and moving the additive slurry from the first to second vessel appear[s] not to be defined over the prior art.” Id. He also found that the limitation on the additive slurry that it be “mixed separate from the dredged material” did not “give much patentable weight to the claim and moreover, would not be defined over the prior art.” Id.

The applicant submitted a final amendment of his claims to the Patent Examiner on April 19, 2001, which canceled 18 claims and modified the remaining four claims to include the limitation “slurry.” Id. at A240-53. The applicant also further defined the term “first vessel” as “containment receptacle” and “second vessel” as “mixing container.” Id. at A250. Finally, the applicant replaced the language “moving the additive slurry from the second vessel to the first vessel” with “pumping the additive slurry from the mixing container to a mixing assembly disposed within the containment receptacle.” Id.

In arguing for patentability, the applicant stated that:

In the preferred embodiment of the present invention, the containment receptacle is shown to be a barge o[r] scow. The dredged material deposited into the containment receptacle remains therein during the step of removing the free water from the dredged material. An additive slurry is created in a mixing container which is separate from the containment receptacle. The additive slurry is pumped from the mixing container to a mixing assembly which is disposed within the containment receptacle to mix the dredged material with the additive slurry to form a substantially homogenous mixture. The homogenous mixture is then allowed to cure within the containment receptacle and is not removed until the curing process is finished. This method substantially reduces any particulate emissions which occur in a process outlined above. Applicant respectfully submits that HALEY, either singularly or in

combination with KAPLAND, MIYOSHI, KIGEL or any other cited prior art fails to show, teach, or disclose the required steps of the pending amended claims.

Id. at A243-44. The applicant emphasized that the Kaplan, Miyoshi, and Kigel Patents each had failed to show the claimed steps of “creating an additive slurry in a mixing container and pumping the additive slurry from the mixing container to a mixing assembly disposed within the containment receptacle.” Id. at A242-43. Furthermore, the applicant distinguished his claims from prior art by arguing that “KAPLAND in view of MIYOSHI in fact teaches away from the Applicant’s present invention by adding dry additives which contribute to potentially harmful particulate emissions.” Id. at A243.

These amended claims ultimately issued as the claims of the '731 Patent. A comparison of the language as it changed through the various stages of the amendment process appears below.

Original Claim 1	Claim 3, as Amended on April 9, 2001	Claim 3, as Amended on April 23, 2001 and issued as the Final Claim 1
A method for producing a structural fill material comprising the steps of:	3. (Amended) The method for producing a structural fill material comprising the step (sic) thereof:	1) The method for producing a structural fill material comprising the steps of:
obtaining a dredged material;	obtaining a dredged material;	obtaining a dredged material;
	depositing the dredged material into a first vessel;	depositing the dredged material into a containment receptacle;
removing free water from the dredged material;	removing free water from the dredged material and first vessel;	removing free water from the dredged material and the containment receptacle;
	creating an additive slurry in a second vessel;	creating an additive slurry in a mixing container;
	moving the additive slurry from the second vessel to the first vessel;	pumping the additive slurry from the mixing container to a mixing assembly disposed within the containment receptacle;
mixing an additive into the dredged material to form a substantially homogenous mixture; and	mixing the additive slurry into the dredged material to form a substantially homogenous mixture; and	mixing the additive slurry into the dredged material to form a substantially homogenous mixture; and,
curing the substantially homogenous mixture, thereby producing a structural fill material.	curing the substantially homogenous mixture in the first vessel, thereby a structural fill material is produced and particulate emissions are reduced.	curing the substantially homogenous mixture in the containment receptacle, thereby producing a structural fill material and reducing particulate emissions.

E. The Present Litigation

On June 21, 2006, TDM filed suit against the United States in this Court alleging that USACE contractors, including Donjon, infringed its patented methods of processing dredged material during performance of USACE contracts. TDM seeks to hold the Government liable for the contractors' actions under 28 U.S.C. § 1498. On November 8, 2007, Defendant filed a "motion for partial summary judgment for lack of subject matter jurisdiction" as to 18 USACE contracts awarded by the agency's New York District. Following full briefing and oral argument on the motion, the Court denied Defendant's motion for partial summary judgment on September 17, 2008. TMD America, LLC v. United States, 83 Fed. Cl. 780 (2008). The Markman claim construction proceedings followed.

Discussion

A. Applicable Claim Construction Principles

1. Ordinary and Customary Meaning

Claim construction is a question of law for the Court to decide. Sevenson Envtl. Servs., Inc. v. United States, 76 Fed. Cl. 51, 57-58 (2007) (citing Markman, 517 U.S. at 388-91); Vitronics Corp., 90 F.3d at 1581-82. A court should construe claim terms according to the ordinary and customary meanings attributed by those of ordinary skill in the relevant art at the date of invention (i.e., as of the effective filing date of the patent application). Phillips, 415 F.3d at 1312-13 (citations omitted); Abraxis Bioscience, Inc. v. Mayne Pharma (USA) Inc., 467 F.3d 1370, 1376 (Fed. Cir. 2006) (citations omitted); Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc., 334 F.3d 1294, 1298 (Fed. Cir. 2003), rehearing en banc denied, (2003) (citation omitted); CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed. Cir. 2002), rehearing denied, (2002) (citations omitted). The Federal Circuit has explained that a "person of ordinary skill is a hypothetical person who is presumed to be aware of all the pertinent prior art." Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc., 807 F.2d 955, 962 (Fed. Cir. 1986). Factors to consider when determining the level of skill include: type of problems encountered in art, prior art solutions to those problems, rapidity with which innovations are made, sophistication of the technology, and education level of workers in the field. Id.

Plaintiff asserts that a person of ordinary skill in the art of processing and remediation of contaminated material at the time of the patents-in-suit would have been one with approximately seven years of work experience in the environmental industry, including five years of experience in the remediation and processing of contaminated materials, all at the level of engineering technician or assistant project manager with at least three years experience above the junior level. (Pl.'s Expert Report of Donald R. Sansing ¶ 18, Nov. 13, 2008). Alternatively, the person would hold a bachelor's degree in environmental science or a related science field and have four years of work experience in the environmental industry, including three in the remediation and processing of contaminated materials, all at the level of engineer or project manager. Id.

An exception to the plain meaning rule is that the patentee is his or her own lexicographer. Phillips, 415 F.3d at 1316 (citing CCS Fitness, Inc., 288 F.3d at 1366). The patentee is free to define a claim term in any way that he or she wishes, even if that definition is inconsistent with the plain meaning. Id. However, the patentee must express his or her intent to redefine a particular term with “sufficient clarity to put one reasonably skilled in the art on notice that the inventor intended to redefine the claim term.” Merck & Co., Inc. v. Teva Pharm. USA, Inc., 395 F.3d 1364, 1370 (Fed. Cir. 2005) (citations omitted).

2. Intrinsic Evidence

The claims themselves are the starting point for any claim construction. Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305 (Fed. Cir. 1999) (citing Vitronics Corp., 90 F.3d at 1576). When interpreting a claim, a court should look first to the intrinsic evidence, which includes: (1) the language of the claims themselves, (2) the written specification, and (3) the prosecution history. Bell & Howell Document Mgmt. Prods. Co. v. Altek Sys., 132 F.3d 701, 705 (Fed. Cir. 1997), rehearing denied, (1998) (citing Vitronics Corp., 90 F.3d at 1582-83). The intrinsic evidence is the documentation that serves as the public record of the patent, protecting the patentee from infringement while allowing competitors “to design around the claimed invention.” Id. at 706. Such evidence is “the most significant source of the legally operative meaning of disputed claim language.” Vitronics Corp., 90 F.3d at 1582.

All claim terms are generally presumed to have meaning in a claim. Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1119 (Fed. Cir. 2004) (citation omitted). Accordingly, the Court cannot construe claims to read an express limitation or element out of the claims. See Tx. Instruments Inc. v. United States Int’l Trade Comm’n, 988 F.2d 1165, 1171 (Fed. Cir. 1993) (quoting Autogiro Co., 384 F.2d at 396). Furthermore, the doctrine of claim differentiation holds that different words within a claim and among claims have different meanings. Andersen Corp. v. Fiber Composites, LLC., 474 F.3d 1361, 1369 (Fed. Cir. 2007) (quoting Karlin Tech. Inc. v. Surgical Dynamics, Inc., 177 F.3d 968, 971-72 (Fed. Cir. 1999)); Innova/Pure Water, Inc., 381 F.3d at 1119-20 (citation omitted). However, usage of a term in one claim can often illuminate the meaning of the same term in other claims. See Phillips, 415 F.3d at 1314. Where patents-in-suit all derive from the same parent application and share many common terms, the Court must interpret the claim consistently across all asserted patents. NTP, Inc. v. Research in Motion, Ltd., 418 F.3d 1282, 1293 (Fed. Cir. 2005), rehearing en banc denied, (2005) (citations omitted); Microsoft Corp. v. Multi-Tech Sys. Inc., 357 F.3d 1340, 1350 (Fed. Cir. 2004), rehearing en banc denied, (2004) (citations omitted).

When considering intrinsic evidence, the Court must also read claims in view of the specification of which they are a part. Phillips, 415 F.3d at 1315 (citation omitted). A patent specification consists of a written description of (1) the invention, (2) the manner and process of making and using the invention, and (3) a “preferred embodiment” of the invention, which is the best mode contemplated by the inventor for carrying out the invention. See 35 U.S.C. § 112. The specification may be used as a dictionary, which explains the invention and defines terms used in the claims. Markman v. Westview, 52 F.3d 967, 979 (Fed. Cir. 1995), aff’d, 517 U.S. 370 (1996) (citation omitted); Bell Atl. Network Servs. v. Covad Commc’ns Group, 262 F.3d 1258, 1268 (Fed.

Cir. 2001) (citation omitted). The Court may also use the drawings or figures included or the documents expressly incorporated by reference in the specification to flesh out the words. Autogiro Co., 384 F.2d at 398 (citations omitted).

The Court should avoid reading a specification so narrowly as to confine the related claim to the embodiment described by the specification. See Acumed LLC v. Stryker Corp., 483 F.3d 800, 805 (Fed. Cir. 2007), rehearing en banc denied, (2007) (quoting Phillips, 415 F.3d at 1323); Ventana Med. Sys., Inc. v. Biogenex Labs., Inc., 473 F.3d 1173, 1181 (Fed. Cir. 2006), rehearing en banc denied, (2007) (quoting Phillips, 415 F.3d at 1323); SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1340-41 (Fed. Cir. 2001) (citations omitted). The Federal Circuit has “expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.” Phillips, 415 F.3d at 1323 (citation omitted). Rather, the embodiments may provide examples or representations to help define and clarify the terms of the claim. See Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1571 (Fed. Cir. 1998) (citations omitted). “[U]pon reading the specification in that context, it will become clear whether the patentee is setting out specific examples of the invention to accomplish those goals, or whether the patentee instead intends for the claims and the embodiments in the specification to be strictly coextensive.” Phillips, 415 F.3d at 1323 (citation omitted).

Finally, in construing claim language, the Court must consider the patent’s prosecution history before the United States Patent and Trademark Office (“PTO”). Markman, 52 F.3d at 980 (citation omitted); Phillips, 415 F.3d at 1317 (citations omitted). Prosecution history facilitates claim construction by revealing the intended meaning and scope of technical terms and may even trump the weight of specification language in some circumstances. Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc., 200 F.3d 795, 804 (Fed. Cir. 1999) (citation omitted). A patentee may not construe a term one way to win approval from the PTO and then use the term in a different way against accused infringers. Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed. Cir. 1995), rehearing en banc denied, (1995) (citing Unique Concepts, Inc. v. Brown, 939 F.2d 1558, 1562 (Fed. Cir. 1991)). Prosecution history prevents “a patentee from regaining, through litigation, coverage of subject matter relinquished during prosecution of the application for the patent.” Wang Labs. v. Mitsubishi Elecs. Am., Inc., 103 F.3d 1571, 1577-78 (Fed. Cir. 1997), rehearing en banc denied, (1997) (citation omitted). Accordingly, courts must determine “whether a patentee relinquished a particular claim construction based on the totality of the prosecution history, which includes amendments to claims and arguments made to overcome or distinguish references.” Rheox, Inc. v. Enact, Inc., 276 F.3d 1319, 1326 (Fed. Cir. 2002) (citation omitted). Claims that the patentee narrowed in order to obtain the patent cannot be interpreted to extend to that which was previously eliminated from the patent. Graham v. John Deere Co., 383 U.S. 1, 33 (1966) (citations omitted). Furthermore, arguments made during prosecution to distinguish a claimed invention over prior art limit the interpretation so as to exclude any construction that was disclaimed or disavowed. Southwall Tech., Inc., 54 F.3d at 1576 (citation omitted).

3. Extrinsic Evidence

If the intrinsic evidence is insufficient and the claim language remains ambiguous, the Court may look to any extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art. Phillips, 415 F.3d at 1317 (citations omitted). Extrinsic evidence consists of all evidence apart from the patent and its prosecution history, including prior art, treatises, and expert testimony. Id. at 1318 (citations omitted); Vitronics Corp., 90 F.3d at 1584 (citation omitted). These sources can provide insight into how a person of ordinary skill in the relevant art would interpret the claim and whether an otherwise common term has a special meaning in a given field. See Phillips, 415 F.3d at 1317. The Court also may look to extrinsic evidence for assistance in understanding the underlying patent technology. See Vitronics Corp., 90 F.3d at 1584 (citing Markman, 52 F.3d at 979). The Court, however, may not use extrinsic evidence “to arrive at a claim construction that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent.” Key Pharms. v. Hercon Labs. Corp., 161 F.3d 709, 716 (Fed. Cir. 1998), rehearing en banc denied, (1999) (citations omitted); Vitronics Corp., 90 F.3d at 1583 (“In those cases where the public record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper.”).

4. Narrowing a Claim Term’s Meaning

There are three limited instances where the Court should narrow a claim term’s meaning from an ordinary and customary meaning:

(1) If a patent specification reveals a *special definition* given to a claim term by the patentee that differs from the meaning it would otherwise possess. Phillips, 415 F.3d at 1316 (emphasis added). In such case, the inventor’s definition will govern. Id. However, there is a heavy presumption in favor of the ordinary meaning unless the patentee clearly has set forth an explicit definition for a claim term. Prima Tek II, L.L.C. v. Polypap, S.A.R.L., 318 F.3d 1143, 1148 (Fed. Cir. 2003), rehearing en banc denied, (2003) (citations omitted).

(2) If the patent specification reveals an *intentional disclaimer*, or disavowal, of a claim scope by the inventor. Phillips, 415 F.3d at 1316 (emphasis added). This intention must be clear and cannot draw limitations from a preferred embodiment. Conoco, Inc. v. Energy & Env’tl. Int’l, L.C., 460 F.3d 1349, 1357 (Fed. Cir. 2006), rehearing en banc denied, (2006) (citing Teleflex, Inc. v. Ficoş N. Am. Corp., 299 F.3d 1313, 1325 (Fed. Cir. 2002), rehearing en banc denied, (2002)).

(3) If a patentee has made a *clear and unmistakable disavowal* of scope during the prosecution of the patent. Purdue Pharma L.P. v. Endo Pharms., Inc., 438 F.3d 1123, 1136 (Fed. Cir. 2006) (citations omitted) (emphasis added). Such a disavowal is known as the doctrine of prosecution disclaimer. Id.

5. Method Claims

The invention recited in a method claim is the performance of a series of steps. NTP, Inc., 418 F.3d at 1322 (citing In re Kollar, 286 F.3d 1326, 1332 (Fed. Cir. 2002)). The recited steps in a method claim do not have to be performed in the sequence recited in the claim unless logic, grammar, or the specification so require. See Interactive Gift Express, Inc. v. Compuserve Inc., 256 F.3d 1323, 1342-43 (Fed. Cir. 2001) (citations omitted). To establish whether the steps of a method claim must be performed in the order in which they are written, the Court must conduct a two-part test. Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1369 (Fed. Cir. 2003), rehearing denied, (2003) (citing Interactive Gift, 256 F.3d at 1342-43). First, the Court looks to the claim language to determine if logic or grammar requires performance of the steps in the order written. Id. (citation omitted). If not, the Court examines the rest of the specification to decide whether it “directly or implicitly requires such a narrow construction.” Id. at 1370 (citation omitted). If either condition is met, the steps recited in the method claim must be performed in the order written. See id.

B. The ‘614 and ‘862 Patents

The ‘614 and ‘862 Patents are related patents that originated from the same patent application and share a common specification. Accordingly, the Court will give claim terms appearing in both patents the same interpretation. See, e.g., NTP, Inc., 418 F.3d at 1293. The Court will first address the key disputed terms that appear in both claim 1 of the ‘614 Patent and claim 2 of the ‘862 Patent and then analyze the remaining disputed terms that appear in only one of the two patents. The Court will not discuss claims 2 or 4 of the ‘614 Patent or claim 3 or 4 of the ‘862 Patent because the parties agree that the plain meaning applies, and no further construction is necessary.

I. Analysis of Key Terms Appearing in Both Patents

a. Processing

Claim 1 of the ‘614 Patent and Claim 2 of the ‘862 Patent recite the same preamble, which states: “[a] method for processing waste material comprising the steps of . . .” (PX 2, A28, col. 3, lines 60-61; PX 3, A37, col.4, lines 17-18). Defendant contends that the preamble limits the claim’s scope, and therefore, the Court must construe the disputed term “processing.” (Def.’s Brief at 34). To that end, Defendant asserts that “processing” means “remediation processing, whereby soil which is polluted, toxic, or otherwise contaminated is rendered stable – either chemically, physically, or both – by mixing the soil with an additive, thereby containing the hazardous components of the waste material.” Id. Plaintiff rejects this view and argues that the preamble is merely introductory and not a limitation on the claim because it does not recite a central step. (Pl.’s Brief at 16). Therefore, “processing” is not limited to “remediation processing.” (Pl.’s Reply Brief at 32-33).

The Court agrees with Plaintiff that the preamble does not contain limiting language. A preamble is an introductory phrase in the claim that often summarizes the invention or its intended uses or properties. See, e.g., Bristol-Myers Squibb Co. v. Immunex Corp., 86 F. Supp. 2d 447, 450 (D.N.J. 2000) (citation omitted). A preamble is presumed to be merely introductory language and not a limitation to the claim. Innova/Pure Water, Inc., 381 F.3d at 1118 (citing In re Paulson, 30

F.3d 1475, 1479 (Fed. Cir. 1994)). Only if the preamble recites essential structure or steps or is “necessary to give life, meaning, and vitality” to the claim does it limit the claimed invention. Catalina Mktg. Int’l, Inc., 289 F.3d at 808 (quoting Pitney Bowes, Inc., 182 F.3d at 1305). Where the patent references a preamble term again in the claim, the surrounding preamble language is incorporated by reference into the claimed invention and is limiting. See Bell Commc’ns Research, Inc. v. Vitalink Commc’ns Corp., 55 F.3d 615, 621 (Fed. Cir. 1995). In the present claims, the term “processing” as referenced in the preamble does not recite an essential step or give life to the claims. Nor is it an antecedent later used in the body of the claim. Therefore, the Court adopts Plaintiff’s construction of the term and will not read a limitation into “processing.”

b. Waste material

Claim 1 of the ‘614 Patent and Claim 2 of the ‘862 Patent both contain the term “waste material.” The term first appears in the preamble of both patents, and Plaintiff therefore contends that the language is merely introductory and not limiting. Accordingly, Plaintiff urges the Court to adopt a broad interpretation of “waste material” that does not restrict the type of material used. (Pl.’s Brief at 16). In support of this view, Plaintiff emphasizes that the ‘614 Patent specification states: “[i]n general, in a first aspect, the invention features processing waste material by homogenizing waste material in a homogenizer” (PX 2 at A27, col. 1, lines 18-20). Later on, the specification explains that “[s]olid or semi-solid waste material (e.g., contaminated soil) to be processed is loaded into a loading hopper 10 of an homogenizer 12” Id. at A27, col. 2, lines 10-12. Plaintiff argues that the patentee used “e.g.” to denote that contaminated soil merely represents one example of many types of waste material. (Pl.’s Brief at 17). The specification states further that “[b]y solid or semi-solid, it is meant that the soil consistency may range from dry and totally solid to flowable – e.g., sludge-like – with as little as 5% by weight, solid chunks.” (PX 2 at A27, col. 2, lines 12-15). Finally, the specification discloses that “[t]he waste material may be scooped up from a supply dump 14 previously deposited near the loading hopper, or from a sludge pit (not shown), and loaded into the loading hopper using an excavator 16.” Id. at A27, col. 2, lines 15-18. By using the term “waste material” rather than a specific type of waste material, Plaintiff asserts that the patentee intended to use the term in the broadest sense.

Defendant contends that “waste material” refers exclusively to soil and asks the Court to define the term as “contaminated soil, such as soil contaminated with mining waste.” (Def.’s Brief at 36). Defendant emphasizes that the patent specification repeatedly describes “contaminated soil” as the waste material being treated. The Background of the Invention to the ‘614 Patent states that “[t]his invention relates to remediation processing of contaminated soil.” (DX 2 at A27, col. 1, lines 6-7). Similarly, the Abstract to the ‘614 Patent explains that “[a]n apparatus and method for chemically and physically stabilizing contaminated soil is disclosed The apparatus and method are useful for processing highly clumped and/or acidic soil, e.g., soil contaminated with mining waste.” Id. at A21. Later, the specification discloses that “[t]he invention provides a method and apparatus useful for processing soil which is heavily clumped and/or acidic, e.g., soil contaminated with mining waste.” Id. at A27, col. 1, lines 58-60.

The Court agrees with Plaintiff that “waste material” does not refer exclusively to contaminated soil. Defendant is correct that the Background of the Invention describes the invention

as a method for remediation processing of contaminated soil. However, this section merely explains the ultimate objective of the invention and not the series of steps that lead up to it. These steps include receiving waste material, separating out and discharging undesirable chunks, and then homogenizing, weighing, and mixing an additive into the waste material in order to treat any contaminated soil within it. The other references to “soil” to which Defendant points merely support the proposition that the overall purpose of the invention is to treat contaminated soil, not that the material originally received into the homogenizer must only contain soil. The Court should construe the term “waste material” according to its ordinary and customary meaning and not read a limitation into it unless the patentee expresses such an intention with clarity. See, e.g., Phillips, 415 F.3d at 1312-13 (citation omitted). The patentee chose the term “waste material” and not “soil” so as not to limit the type of material covered by the patent. Any reference to “soil” in the specification is used in the context of an example or preferred embodiment, as denoted with the use of “e.g.” Accordingly, the Court will not confine the definition of “waste material” to the embodiment described by the specification. See, e.g., Acumed LLC, 483 F.3d at 805 (quoting Phillips, 415 F.3d at 1323).

⦿ Vibrating screen box

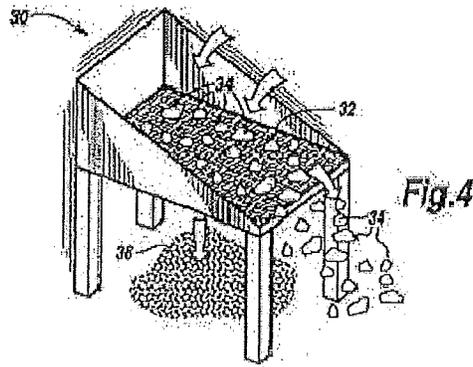
Claim 1 of the ‘614 Patent contains the step of “receiving said waste material in a vibrating screen box.” (PX 2, A28, col. 3, line 62). Claim 2 of the ‘862 Patent includes similar language. (See PX 3, A37, col.4, line 19). Plaintiff argues that “vibrating screen box” refers to a structure or apparatus in which a screen is mounted or otherwise held so that it may be moved. (Pl.’s Brief at 18). In Plaintiff’s view, the term is not limited to an actual box and is used interchangeably with “vibrating screen.” Id. Finally, Plaintiff asserts that there is no requirement that the box itself be caused to vibrate. Id. Defendant contends that “vibrating screen box” means a mechanical device that (1) uses a screen with openings of a predetermined size to separate out lumps greater than said predetermined size and (2) includes a mechanical shaker that vibrates the entire device, including the box holding the mesh screen. (Def.’s Brief at 37). Furthermore, Defendant maintains that “vibrating screen box” should be narrowly construed to refer only to an actual box. (Def.’s Reply Brief at 31).

The intrinsic evidence supports Plaintiff’s proposed construction of the term. The ‘614 Patent specification explains that the purpose of the vibrating screen box is to prescreen the contaminated soil. (See PX 2 at A27, col 2., lines 37-38). The specification states that:

[t]he vibrating screen box, caused to vibrate by a mechanical shaker (not shown), has a slightly sloped mesh bottom 32 with openings of a desired size, e.g., six inches across. Chunks of waste material 34 which are larger than the openings bounce off to the side of the screen box, and the remainder of the waste material 36 passes through the vibrating screen box when it vibrates.

Id. at A27, col. 2, lines 38-44. Figure 4 of the ‘614 Patent shows a screen which is caused to be vibrated by a mechanical shaker. Id. at A26, Fig. 4. The vibrating screen box depicted in Figure 4 as a preferred embodiment is a frame with a flat bottom and three sides, two of which are sloped and

hold a screen, thus resembling an arcade game. *Id.* This depiction suggests that a “vibrating box” is not limited to a four-sided box but merely refers to an apparatus that contains a screen capable of inducing movement or vibration therein.



This construction is consistent with the ‘614 Patent’s prosecution history, which shows that the patentee and the Patent Examiner used the terms “vibrating screen box” and “vibrating screen” interchangeably. In a December 2, 1994 amendment, the patentee argues that “[q]uite unlike Taylor, the present invention removes all large lumps of waste material completely from the process by requiring the waste material to pass through a *vibrating screen* having openings of a predetermined size.” (PX 6 at TDM000307) (emphasis added). However, the patentee referred to a “vibrating screen box” earlier in the same amendment. *Id.* at 299. Likewise, the examiner noted in a May 16, 2005 office action that “Taylor does not disclose the *vibrating screen*” and then went on to say that “Silveri et. al. teaches, in the analogous field of separation and comminution, a *vibrating screen* . . .” *Id.* at TDM000315-16 (emphasis added). Therefore, both the specification and prosecution history establish that a “vibrating screen box” means any apparatus or device containing a screen that can be moved and need not be an actual box.

Furthermore, there is no indication that the entire box must be caused to vibrate. Defendant contends that the phrase “caused to vibrate by a mechanical shaker” modifies “box” and not “screen,” which infers that the entire box must vibrate. (Def.’s Brief at 37). Defendant also argues that the series of undulating lines surrounding the picture of the vibrating screen box in Figure 4 affirms this interpretation. *Id.* However, the ‘614 Patent specification contains no such limitation on what part of the vibrating screen must be vibrated. Moreover, the undulating lines depicted in Figure 4 indicate motion but do not restrict what parts or how much of the screen vibrates. Figure 4 merely represents a preferred embodiment, which the Court will not read into the claim.

(d) Vibrating

Claim 1 of the ‘614 Patent contains the step of “vibrating said vibrating screen box to separate lumps of said waste material . . .” (PX 2, A28, col. 3, lines 63-64). Claim 2 of the ‘862 Patent includes similar language. (See PX 3, A37, col.4, lines 20-21). Plaintiff argues that the ordinary meaning of the term “vibrating” applies and construes the element as “[t]he screen is

vibrated, shaken or moved so that lumps of waste material larger than the size of the screen openings are removed, while smaller lumps pass through the screen (for further processing in accordance with the patent claim).” (Pl.’s Brief at 20). Defendant maintains that “vibrating” means a “shaking to and fro as opposed to a rotational movement in a continuous direction.” (Def.’s Brief at 39). In support of this view, Defendant emphasizes that the ‘614 Patent specification states that the vibrating screen box is “caused to vibrate by a mechanical shaker” (See DX 2 at A27, col. 2, lines 38-39). Defendant then offers definitions from a general use dictionary, which defines “to shake” as “to move to and fro” and “to vibrate” as “to move to and fro or from side to side: Oscillate.” (DX 24 at A876-77). Finally, Defendant contends that the prosecution history supports such a limitation because the ‘614 Patent was allowed over prior art that disclosed a device using rotational disks. (Def.’s Brief at 39).

The Court adopts Plaintiff’s construction of the term “vibrating.” Neither the claims nor the specifications limit the directional movement of the vibrating screen box. Furthermore, the prosecution history does not enlighten the definition of “vibrating.” The prior art raised by Defendant above does not disclose a vibrating screen; rather, it refers to a series of rotational discs used to separate material. Therefore, it would be improper to read the ‘614 Patent prosecution history as disavowing rotational movement under the definition of “vibrating.” Finally, the Court need not look to extrinsic evidence in this case because the term “vibrating” is not ambiguous. Even if the Court felt it necessary to do so, the Court would not consult the definition of “to shake,” a term not included in the patent. The Court must construe the term through the eyes of one of ordinary skill in the art, which favors using a technical dictionary over a standard dictionary. See *Phillips*, 415 F.3d at 1318 (citing *Vitronics Corp.*, 90 F.3d at 1584 n.6). The *McGraw-Hill Dictionary of Engineering* defines “vibrating screen” as “[a] sizing screen which is vibrated by a solenoid or magnetostriction, or mechanically by eccentrics or unbalanced spinning weights.” (PX 9 (Reply) at 545). This definition does not restrict the directional movement of the vibration as Defendant suggests.

e. Dropping

Claim 1 of the ‘614 Patent contains the step of “dropping said waste material into a mixer after homogenizing” (PX 2, A28, col. 4, lines 6-7). The parties dispute the meaning of “dropping.” Claim 2 of the ‘862 Patent also includes the term “dropping,” and, accordingly, the Court interprets this word consistently between the two claims. Plaintiff asserts that “dropping” means that the waste material drops or falls into the mixer after it is homogenized. (Pl.’s Brief at 24). After homogenization, the waste material is transferred directly or by another means of conveyance such as from a chute, conveyor, or hopper to where it falls into the mixer. *Id.* Defendant construes “dropping” to require the waste material to fall by gravity into the mixer. (Def.’s Brief at 40).

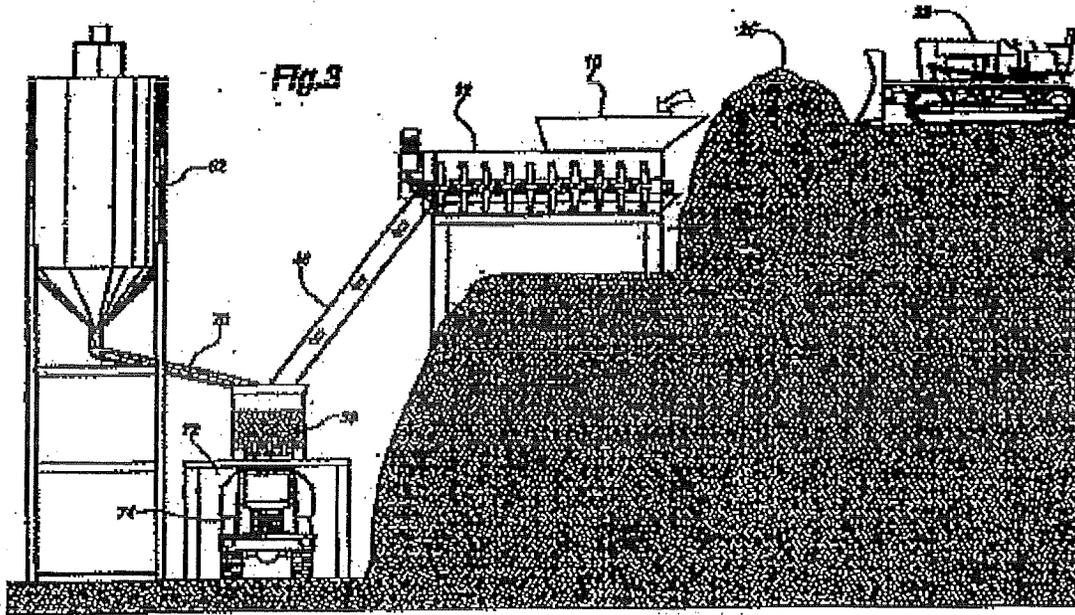
The Court adopts Defendant’s construction of the term “dropping.” The Summary of the Invention describes an apparatus that includes a “mixer located below the homogenizer to receive waste material from the homogenizer *by gravity feed*” (DX2 at A27, col. 1, lines 38-40) (emphasis added). The specification goes on to state that “[t]he waste drops, *by gravity*, through discharge chute 46 into a mixer 58 located below the homogenizer.” *Id.* at A28, col. 3, lines 16-18

(emphasis added). The patentee uses the term “gravity” as a requirement and not in the context of a preferred embodiment. Therefore, the Court interprets the term “dropping” to mean falling as a result of gravity.

Located below

In the same element as discussed immediately above, Claim 1 of the ‘614 Patent goes on to state that “said mixer [is] located below said homogenizer.” *Id.* at A28, col. 4, line 7. The parties dispute the meaning of “located below.” Claim 2 of the ‘862 Patent also includes the term “located below” in another element, and, accordingly, the Court interprets these words consistently between the two claims. Plaintiff contends that “located below” only requires that the waste material enter the mixer after exiting the homogenizer and not that the mixer be located physically below the homogenizer. (Pl.’s Brief at 24). Plaintiff explains that the ‘614 Patent is a method claim which recites a series of steps not restricted to the order in which they are written unless the language of the claim so provides. *Id.* at 24-25. Here, the element lays out a sequence such that waste material drops into the mixer after homogenizing, clarifying that the mixer is located below the homogenizer in the process flow. *Id.* at 24. According to Plaintiff, any of the following situations meets the definition of “located below:” (1) the mixer being located physically below the homogenizer; (2) the mixer being located below the point of transfer or drop point from the homogenizer such that the waste material drops or falls into the mixer from a chute, conveyor, or hopper; or (3) the mixer being located after the homogenizer in the process flow. *Id.* Defendant construes “located below” to mean that the mixer is located at a lower level or altitude than the homogenizer. (Def.’s Brief at 40-41). Defendant argues that if the material must drop by gravity into a mixer, as the Court concludes, then that mixer necessarily is located physically below the homogenizer. *Id.* at 41. In support of this view, Defendant offers all of the figures depicting the apparatus, each of which shows a mixer located at a lower level than the homogenizer. *Id.*

The Court concludes that “located below” means physically below. The element in dispute states as follows: “dropping said waste material into a mixer *after* homogenizing, said mixer *located below* said homogenizer.” (DX 2 at A28, col. 4, lines 7-8) (emphasis added). If the term “located below” merely meant “after in the process” as Plaintiff suggests, then the Court would be reading out of the claim the term “after.” All claim terms are generally presumed to have meaning. *Innova/Pure Water, Inc.*, 381 F.3d at 1119 (citation omitted); *see also Tx. Instruments Inc.*, 988 F.2d at 1171 (internal citation omitted). Furthermore, under the doctrine of claim differentiation, the Court will not infer that two different words within a claim— “located below” and “after”— have the same meaning. *See, e.g., Andersen Corp.*, 474 F.3d at 1369 (citation omitted). Therefore, Plaintiff’s definition of “located below” does not accurately reflect the plain meaning of the term. The Court notes however, that nothing in the ‘614 Patent specification requires the mixer to be located *directly* below the homogenizer so long as it sits at a lower level or altitude than the homogenizer. Figures 1A, 2, and 3 all depict preferred embodiments in which the mixer sits below, but not directly underneath, the homogenizer. As an example, Figure 3 appears as follows:



g. Mixer

Both claim 1 of the '614 Patent and claim 2 of the '862 Patent require the use of a "mixer" as part of the remediation process. However, the '862 Patent differs from the '614 Patent in that it removes the step of homogenizing the waste material. As a result, both the homogenization and mixing of the waste material take place in the mixer and not in separate locations. The parties do not dispute this distinction. They do dispute the definition of "mixer." Plaintiff argues that the Court should interpret "mixer" in both patents as a device or apparatus capable of combining or blending the additive and waste material. (Pl.'s Brief at 28). Defendant urges the Court to construe "mixer" in both patents as a mechanical device that (1) mixes the waste material and additive, (2) is separate from the homogenizer, and (3) includes weight-sensing elements (for weighing batches of waste material). (Def.'s Brief at 49).

The Court affirms Defendant's construction of "mixer" but remarks that it finds no material difference between the two parties' interpretations in light of the Court's construction of other terms in the two patents. Defendant admits that the first element of its definition corresponds generally with Plaintiff's definition as a whole. (Def.'s Reply Brief at 48). The second element requiring the mixer to be separate from the homogenizer adds no new meaning to the term. Later in this opinion, the Court adopts Defendant's construction of "homogenizer" as used in the '614 Patent to mean a device separate and distinct from the mixer. The '862 Patent does not use a homogenizer, so including the phrase "is separate from the homogenizer" merely restates the obvious. Finally, the third element of Defendant's definition agrees with the Court's later determination that the process

of weighing must occur in the mixer. Both patent specifications state that “[t]he mixer includes mixing augers which counter-rotate, as well as weight sensing elements.” (DX 2 at A27, col. 1, lines 50-52; DX 3 at A36, col. 1, lines 50-52). This language limits the construction of “mixer” rather than merely reciting a preferred embodiment as Plaintiff suggests.

h. Accumulating a batch

Claim 1 of the ‘614 Patent contains the step of “accumulating a batch of waste material in said mixer . . .” (PX 2, A28, col. 4, line 8). Claim 2 of the ‘862 Patent includes similar language. (See PX 3, A37, col. 4, line 28). Plaintiff defines this element as “accumulating, loading or gathering a certain amount of waste material in the mixer.” (Pl.’s Brief at 28). According to Plaintiff, the patent specification does not limit how much waste must accumulate; rather, it simply indicates that a certain amount of waste material gathers with the purpose of determining how much additive must be added. *Id.* at 28-29. Defendant focuses on the term “batch” and construes this element as “gathering a discrete amount (or group) of waste material in the mixer, which is separately mixed with an additive through one operation of the claimed method.” (Def.’s Brief at 41). Defendant argues that the language of the claims calls for a “batch” of material to accumulate, rather than a constant flow of material into the mixture. *Id.* at 42.

The Court agrees that a “batch” refers to a discrete amount of material. Plaintiff argues that Defendant’s construction reads a limitation into the claim against the patentee’s intent. The Court disagrees. Defendant’s construction merely gives the term “batch” its plain meaning as one of ordinary skill in the art would understand it. If the patentee meant to describe a continuous flow process, he would have used the words “ratio” or “proportion” and not “batch.” Interpreting “accumulating a batch” as encompassing a continuous flow of material would fail to give meaning to the term “batch,” as required under the canons of claim construction applied by this Court. See *Innova/Pure Water, Inc.*, 381 F.3d at 1119 (citation omitted). Furthermore, the specification itself describes a process in which discrete amounts of waste material gather. The ‘614 Patent specification states that “[w]aste material is dropped into the mixer until a *batch weight* has been loaded into the mixer . . .” (DX2 at A28, col. 3, lines 18-19) (emphasis added). After weighing the batch, “the amount of additive necessary to treat the waste material . . . is added to the mixer.” *Id.* at A28, col. 3, lines 37-39. The resulting mixture is then “retained and mixed in the mixer . . . [and] then discharged from the mixer . . .” *Id.* at A28, col. 3, lines 42-44. Thus, one batch of material is weighed and treated separately through one operation of the processing method.

Defendant’s construction of the element also is consistent with the ordinary meaning of “batch” when used in the context of a chemical or physical mixing process. A “batch process” is one in which a quantity of material enters a system and is removed all at once before any additional material is added. (See DX25 at A886). Furthermore, technical dictionaries define “batch” as “[t]he quantity of material required for or produced by one operation” or “[a]n amount of material subjected to some unit chemical process or physical mixing process to make the final product substantially uniform.” (DX 27 at A902; see also DX 28 at 908; DX 24 at A879). These definitions contrast sharply with the notion of a continuous process in which material flows constantly into and out of a mixer during the treatment process.

Finally, the Court of Federal Claims has defined “batch” in accordance with Defendant’s construction in other cases. In Chemical Separation Technologies, Inc. v. United States, the Court found the difference between “continuous treatments” and “batch treatments” to be a “major distinction.” 51 Fed. Cl. 771, 796 (2002). In support of this conclusion, the Court cited an expert’s testimony that “[a] batch treatment is differentiated from continuous flow in that . . . a specific volume of water flows into the tank.” Id. Based on the plain language of the patent and affirmed by dictionary definitions and case law, “batch” can only mean a discrete amount of material.

1. Weighing

Claim 1 of the ‘614 Patent contains the step of “weighing said batch of waste material to determine an amount of additive to be added to said waste material” (PX 2, A28, col. 4, lines 9-10). Claim 2 of the ‘862 Patent includes similar language. (See PX 3, A37, col.4, lines 29-30). The parties dispute the meaning of “weighing.” Plaintiff contends that “weighing” means “[d]etermining the weight, by any means, of the amount of waste material added to the mixer to determine how much of any basic material should be added to the waste material.” (Pl.’s Brief at A29). In this regard, Plaintiff maintains that the patent does not limit the method or location of the weighing, so long as it takes place at some point in the process. (Pl.’s Reply Brief at 44). Consistent with its construction of the previous step in the process, Defendant’s interpretation requires the direct measuring of the waste material’s batch weight within the mixer to determine the amount of additive to be added. (Def.’s Brief at 44). Defendant argues that the weighing step must occur in the mixer because both the preceding and subsequent steps take place in the mixer. Id. Furthermore, Defendant submits that the claims require the method of weighing to be a direct measurement of weight. Id. at 44-45.

The Court agrees with Defendant that the process of weighing must occur in the mixer. The plain language of the patent indicates that the weighing step occurs after the waste material drops into the mixer. Furthermore, the ‘614 Patent specification states that “[o]nce the waste material is loaded *into the mixer and weighed*, the amount of additive necessary to treat the waste material is determined and added to the mixer.” (DX 2 at A28, col. 3, lines 36-39) (emphasis added). This language limits the location of the weighing to the mixer and the time to before the additive is added.

The specification also makes clear that the waste material must be weighed by direct, or scale, measurement of weight. The ‘614 Patent specification describes the inclusion of weight-sensing elements in the mixer. Specifically, it states that “[w]aste material is dropped into the mixer until a batch weight has been loaded into the mixer, as determined by load cells 60 on which the mixer is mounted.” Id. at A28, col. 3, lines 18-20. Furthermore, the Summary of the Invention explains that “[t]he mixer includes mixing augers which counter-rotate, as well as weight sensing elements.” Id. at A27, col. 1, lines 50-52. Plaintiff’s interpretation of “weighing” as allowing any method of weighing, including by indirect measurements such as volumetric calculations, is not supported by the disclosures in the patent. Plaintiff argues that the following specification language indicates that “weighing” may occur through experimentation: “[t]he type and amount of specific additive(s) needed for a given weight of waste material of a given type is determined by experimentation.” Id. at A28, col. 3, lines 34-36. However, “experimentation” refers to a method for determining the amount of additive to be added to the waste material, not the method of weighing

the waste material. Plaintiff also points to the '614 Patent prosecution history in support of its argument that neither location nor methodology for weighing were "significant to patentability." (Pl.'s Brief at 30). Whether a patentee adds a particular limitation to overcome prior art or not does not change the significance of the limitation. The Court must give each and every limitation on a claim meaning. Accordingly, the Court determines that "weighing" must occur by direct measurement in the mixer as Defendant contends.

j. Additive

Both Claim 1 of the '614 Patent and Claim 2 of the '862 Patent involve the process of adding an additive to the waste material. Plaintiff construes the term "additive" to mean any basic, or non-acidic, material. (Pl.'s Brief at 33). Alternatively, Defendant defines the term as "a substance or substances that, when mixed with the waste material, produces a chemically and/or physically stable material, thereby containing the hazardous components of the waste material." (Def.'s Brief at 45).

The Court finds Plaintiff's construction of the term "additive" unduly vague. The '614 Patent specification states that "[t]he treatment additive is calcium oxide (hot lime), calcium carbonate, some other type of lime, or other basic material which neutralizes the acidity of the waste material" (PX at A28, col. 3, lines 28-31). It goes on to provide that "many other additives known in the remediation art such as portland cement, sodium hydroxide, and sodium sulfide can be used, depending on the nature of the material being remediated, and the invention is not to be limited by the particular additive used." *Id.* at A28, col. 3, lines 54-58. Plaintiff formulates its definition of "additive" based on the patent specification's first disclosure but fails to account for the second. The second statement lists several other embodiments of the term "additive," all of which share the trait that they are "known in the remediation art." *Id.* at A28, col. 3, lines 54-55. This disclosure clarifies that the '614 Patent defines "additive" in terms of substances that can be used in the remediation processing of soil and not whether the substance is basic. Finally, Plaintiff's interpretation conflicts with the principle of claim differentiation. This doctrine requires the Court to give meaning to all terms in a patent's claims and to assign a more limited scope to a claim with additional language. *See, e.g., Andersen Corp.*, 474 F.3d at 1369 (citation omitted). Claim 5 of the '614 Patent recites "adding a *basic pretreatment additive* to said waste material in said homogenizer" (PX 2 at A28, col. 4, lines 41-42) (emphasis added). By using the word "basic" to describe "additive" in claim 5, the patentee makes clear his intent that the term "additive" in claim 1 does not refer exclusively to basic material. Thus, the Court rejects Plaintiff's reading of "additive" as a substance merely having a basic quality and adopts Defendant's construction of the term.

k. Processing terminus

Claim 1 of the '614 Patent concludes with the step of "dropping said mixture from said mixer to a processing terminus located below said mixer." *Id.* at A28, col. 4, lines 14-15. Claim 2 of the '862 Patent includes similar language. (See PX 3, A37, col.4, lines 33-34). Beyond the terms discussed above, the parties dispute the meaning of "processing terminus." Plaintiff asserts that this element means that the mixture is discharged from the mixer to an end point located below or after the mixer. (Pl.'s Brief at 34). In support of this view, Plaintiff offers language from the '614 Patent specification stating that "[t]he mixture is then discharged from the mixer by retracting slide gate

located at the bottom of the mixer (not shown) and allowing the mixture to drop, by gravity, to a processing termination location 72.” (PX 2, A28, col. 3, lines 44-48). Defendant argues that the element means dropping the mixture downward (by gravity) to a location that allows entry of a vehicle to receive the processed waste material. (Def.’s Brief at 46).

Plaintiff’s construction of the term “processing terminus” fails to take into account the limiting language in the ‘614 Patent specification. The Summary of the Invention states that “[t]he processing terminus includes space below the mixer which allows entry of a vehicle below the mixer to receive and transport the processed waste material from the apparatus.” (PX 2 at A27, col. 1, lines 54-57). The description of the patent goes on to disclose that “[t]he processing termination location is a truck access pit which is large enough to permit a waste-hauling truck 74 to drive under the mixer and receive the waste/additive mixture as it drops from the mixer. The mixture is then hauled away to a permanent disposal facility.” *Id.* at A28, col. 3, lines 48-52. Plaintiff argues that the preceding statements merely reflect a preferred embodiment of the processing terminus location, and no language in the specification restricts the structure or location of the processing terminus. (Pl.’s Brief at 34). However, the Court finds that, when read as a whole, the language cited in the ‘614 Patent specification above does not merely describe a preferred embodiment. Rather, it limits the structure and location of the processing terminus to an area in which a vehicle can enter in order to remove waste material. Plaintiff’s interpretation of “processing terminus” is therefore overly broad and unduly vague, and the Court adopts Defendant’s construction of the term instead.

2. Analysis of Remaining Term in the ‘614 Patent

a. Homogenizer

Claim 1 of the ‘614 Patent includes the added step of “discharging said waste material of a size less than said predetermined size into a homogenizer” (PX 2 at A28, col. 4, lines 1-2). The parties disagree over the meaning of “homogenizer.” Plaintiff argues that “homogenizer” refers to “an apparatus or device capable of making material more uniform or consistent.” (Pl.’s Brief at 21). Plaintiff also contends that even though the ‘614 Patent specification describes a preferred embodiment of a homogenizer as having a pair of side-by-side homogenizing augers, claim 1 is not limited by this description. *Id.* Defendant construes the term to mean a mechanical device, separate and distinct from the mixer, which homogenizes the waste material. (Def.’s Brief at 39). Defendant distinguishes its definition from Plaintiff’s in that its definition of homogenizer (1) must actually homogenize rather than be merely capable of doing so; (2) must be a mechanical device; and (3) must be separate and distinct from the mixer. (Def’s Reply Brief at 35-36).

The Court agrees with Defendant that the homogenizer is separate and distinct from the mixer. After the method step of requiring “homogenizing said waste material in said homogenizer,” the next element recites the step of “dropping said waste material into a *mixer* after homogenizing, said mixer located below said homogenizer.” (DX 2 at A28, col. 4, lines 6-7) (emphasis added). The claim therefore describes two separate pieces of equipment – the homogenizer and the mixer – with the mixer located below the homogenizer. The patent specification supports this interpretation. The Summary of the Invention notes that “[t]he apparatus includes a homogenizer;

a mixer located below the homogenizer to receive waste material from the homogenizer . . .” *Id.* at A27, col. 1, lines 38-40.

The Court also concludes that the homogenizer must be a mechanical device. The Summary of the Invention states that “[t]he homogenizer includes homogenizing augers which counter-rotate,” implying that the homogenizer must operate mechanically. *Id.* at A27, col. 1, lines 47-48. Plaintiff argues that this description is modified by an earlier sentence, which explains that “[e]mbodiments of the invention *may* include one or more of the following features.” *Id.* at A27, col. 1, lines 43-44 (emphasis added). In Plaintiff’s view, this sentence renders the description of the homogenizer as a mechanical device merely a preferred embodiment. The Court disagrees. The two sentences immediately following the above-mentioned sentence use the conditional tense, stating: “*may* include a loading conveyor” and “*may* be solid.” *Id.* at A27, col. 1, lines 44-47 (emphasis added). However, the patentee declined to employ the conditional tense when stating that “[t]he homogenizer *includes* homogenizing augers which counter-rotate.” *Id.* at A27, col. 1, lines 47-48 (emphasis added). This suggests that the patentee intended for the homogenizer to be a mechanical device. Finally, the specification goes on to describe a homogenizer that has a pair of side-by-side augers, each with homogenizing paddles that are welded or otherwise mounted to a shaft. *Id.* at A27, col. 2, lines 52-62. While this description may be merely a preferred embodiment, that does not detract from the language in the Summary of the Invention requiring the homogenizer to have counter-rotating augers.

In all other aspects of the definitions, the Court finds that the parties agree. Plaintiff’s reading of “homogenizer” as “an apparatus or device capable of making material more uniform or consistent” does not differ materially from Defendant’s interpretation as a “mechanical device . . . which homogenizes the waste material.” (Pl.’s Brief at 21; Def.’s Brief at 39). Claim 1 of the ‘614 Patent states that “homogenizing said waste material” will occur “in said homogenizer.” (DX 2 at A28, col. 4, line 4). The parties agree that “homogenizing” means that the waste material is made more uniform or consistent as compared to the consistency of the waste material when first received by the homogenizer. Indeed, the patent specification states that the homogenizer serves to reduce the size of lumps in the waste material. *Id.* at A27, col. 2, lines 57-58.

3. Analysis of Remaining Term in the ‘862 Patent

a. Mixing and homogenizing

Claim 2 of the ‘862 Patent includes the added step of “mixing and homogenizing the waste material with the additive in the mixer to form a mixture . . .” *Id.* at A37, col. 4, lines 31-33. Plaintiff construes the element to mean that “[t]he waste material and additive are combined and/or blended and the waste material is also made more uniform or consistent in the mixer as compared to the consistency of the material when it is first received in the mixer.” (Pl.’s Brief at 38). Defendant interprets the element to mean “mixing the waste material with an additive in a mixer to form a mixture while simultaneously homogenizing the waste material.” (Def.’s Brief at 51). Thus, the parties only disagree over whether the actions of mixing and homogenizing must occur simultaneously in the mixer.

Defendant's construction of the element as requiring simultaneous mixing and homogenizing in the mixer is the most natural reading of the plain language of the text. The patentee could have included a separate step each for homogenizing and mixing but chose not to do so. The Court gives great weight to the patentee's decision to incorporate these two actions into one step in the claim and therefore adopts Defendant's construction of the element.

C. The '731 Patent

1. Preamble

Claim 1 of the '731 Patent includes a preamble, which states: "[a] method for producing a structural fill material comprising the steps of . . ." (PX 1 at A18, col. 10, lines 16-17). As with the '614 and '862 Patents, Plaintiff argues that the preamble provides an introduction and does not limit the terms of the claim. (Pl.'s Brief at 40). Defendant rejects this notion and asserts that the preamble restricts the definition of "structural fill material" to a soil-like material suitable for beneficial reuse, with improved structural or compressive strength and reduced windborne fugitive dust emissions. (Def.'s Brief at 18).

The Court agrees with Plaintiff that the preamble does not limit the terms of the '731 Patent. A preamble only restricts the meaning of a claim when it constitutes an antecedent for a term later used in the text of the claim. See *Catalina Mktg. Int'l, Inc.*, 289 F.3d at 808 (citation omitted). In the claim at issue, the patentee uses the term "structural fill material" in the preamble and then again in the last step of claim 1. However, the term in the body of the claim does not refer back to the preamble because it does not state "*said* structural fill material." Thus, the Court will not read the preamble as limiting the meaning of "structural fill material" and will construe the term independently later in this opinion.

2. Dredged Material

Claim 1 of the '731 Patent refers repeatedly to "dredged material." Plaintiff urges the Court to adopt a broad interpretation of the term as referring to any material, including sediment, sand, or silt that is removed from waterways. (Pl.'s Brief at 40). According to Plaintiff, the patent specification supports this view by stating that the invention "involves dredging materials such as sediment or silt that has been deposited in navigable waterways such as channels, harbors, lakes, and rivers." (PX 1 at A14, col. 2, lines 53-56). Defendant construes "dredged material" more narrowly to mean material that has been removed from underwater locations by dredging. (Def.'s Brief at 19). Accordingly, Defendant offers language in the specification stating that the "invention relates in general to the fixation, stabilization and solidification of materials *dredged from a waterways . . .*" (DX 1 at A14, col. 1, lines 13-15) (emphasis added). Defendant also maintains that the Background section discusses the importance of waterways in the United States, the need to dredge them to maintain adequate depths, and proper disposal of dredged sediments. *Id.* at A14, col. 1, lines 18-19, 35-37; A14, col. 2, lines 41-45. Finally, Defendant notes that the specification discloses the following:

Once in the treatment vessel 26, the sediment 16 will be referred to herein as dredged materials 28. It should be noted that dredged materials 28 may typically include sands, silts, clays and other materials in addition to sediment 16 that is removed from the subaqueous location such as waterway 14.

Id. at A15, col. 4, lines 16-21.

The Court favors a broad interpretation of “dredged material” as encompassing any material that can be dredged. The Court agrees with Plaintiff that the specification language cited by Defendant above merely explains that “dredged material” *may* include material removed from a subaqueous location such as a waterway but is not limited to material from a subaqueous source. The patent’s description as an invention that “relates in general to the fixation, stabilization and solidification of materials *dredged from a waterways . . .*” does not restrict dredged material to an underwater location as Defendant suggests; rather, it merely explains that the material is removed from a waterway. See id. at A14, col. 1, lines 13-15 (emphasis added). The Court will not read this limitation into the claim absent language that explicitly restricts “dredged material” to a substance deriving from a subaqueous source.

3. Containment Receptacle

Claim 1 of the ‘731 Patent includes the step of “depositing the dredged material into a containment receptacle . . .” (PX 1 at A18, col. 10, lines 19-20). The parties dispute the meaning of the term “containment receptacle,” which the patentee uses repeatedly in the claim. Plaintiff describes “containment receptacle” as any ocean-going or land-based device or apparatus capable of containing or holding material. (Pl.’s Brief at 42). Defendant defines the term as an apparatus, device, or structure, such as a barge, scow, or pit, separate and apart from the mixing container, where dredged material is held during treatment. (Def.’s Brief at 20). The primary difference between these two definitions is that Defendant’s specifies that the containment receptacle is separate from the mixing container in which the additive slurry is created.

The Court agrees with Defendant that the containment receptacle is separate and distinct from the mixing container. The plain language of the claim supports this interpretation. The invention calls for “depositing the dredged material into a containment receptacle” and removing free water from the dredged material. (PX 1 at A18, col. 10, lines 19-22). In separate steps, the method claim then requires “creating an additive slurry in a mixing container” and “pumping the additive slurry from the mixing container to a mixing assembly disposed within the containment receptacle . . .” Id. at A18, col. 10, lines 23-26. The plain language of the patent makes clear that the additive slurry originates in a mixing container and then pumps into the containment receptacle, thus demonstrating that the mixing container and containment receptacle exist separately and distinctly from one another. Under the doctrine of claim differentiation, the Court infers that different words within a claim have different meanings. See, e.g., Andersen Corp., 474 F.3d at 1369 (citation omitted). Thus, the Court must interpret “containment receptacle” and “mixing container” as referring to separate vessels.

The prosecution history also shows that the patent applicant explicitly disavowed any construction of “containment receptacle” not separate and distinct from the mixing container. The patent applicant’s informal amendments called for “depositing the dredged material into a first vessel,” “creating an additive slurry in a second vessel,” and then “moving the additive slurry from the second vessel to the first vessel.” (DX 4 at A230). The Patent Examiner objected, stating that “the method of creating and moving the additive slurry from the first to second vessel appear[s] not to be defined over the prior art.” *Id.* at A228. In the final amendment of the claim, the applicant redefined “first vessel” as “containment receptacle” and “second vessel” as “mixing container.” *See id.* at A246. In argument to the Patent Examiner, the patent applicant repeated several times that “[t]he pending amended claims require the steps of creating an additive slurry in a mixing container and pumping the additive slurry from the mixing container to a mixing assembly disposed within the containment receptacle.” *Id.* at A242-44. He went on to state that “[a]n additive slurry is created in a mixing container *which is separate from the containment receptacle.*” *Id.* at 244 (emphasis added). Thus, the patent applicant explicitly disavowed the possibility that the containment receptacle and the mixing container are one and the same.

4. Free Water

Claim 1 of the ‘731 Patent contains the step of “removing free water from the dredged material and the containment receptacle” (PX 1 at A18, col. 10, lines 21-22). The parties dispute the meaning of “free water.” Plaintiff contends that a person of ordinary skill in the art would understand “free water” to mean the removal of water that is free from dredged material. (Pl.’s Brief at 42). Defendant would limit the term to standing water that has accumulated above the surface of the dredged material in the containment receptacle. (Def.’s Brief at 22). Defendant argues that the patent specification refers only to “free standing water” and not “free water” when describing the invention. (*See* DX 1 at A16, col. 5, lines 3-10, 34-35; A16 col. 6, lines 1-2).

The Court adopts Plaintiff’s interpretation of “free water” because it most accurately reflects the plain meaning of the term. Defendant’s definition impermissibly reads a limitation into the phrase. The claim language requires removal of free water from the dredged material and the containment receptacle but does not specify the method of such removal. The patentee could have used the term “free standing water” but chose “free water” instead. The fact that the patent specification speaks of “free standing water” merely reflects a preferred embodiment and not a limitation on the claim itself. Indeed, the specification offers examples of how free water can be removed from the dredged material without listing any restrictions on the process. For example, it states that “[t]he dredged materials in the treatment vessel are then dewatered and debris removed therefrom” and “free standing water is removed from the treatment vessel using pump 34.” *Id.* at A14, col. 2, lines 59-60; A16, col. 5, lines 3-4. Therefore, the Court will not read a limitation into the claim language where the patentee did not so intend. *See Phillips*, 415 F.3d at 1316.

5. Additive Slurry

Claim 1 of the ‘731 Patent includes the step of “creating an additive slurry in a mixing container” (PX 1 at A18, col. 10, line 23). The parties agree that an “additive” may comprise (1) a cement-based additive, Portland cement, a high alkali additive, CaO, Ca(OH)₂, CaCO₃, or any

mixture thereof; (2) FeCl₃, coal ash, fly ash, bed ash, cement kiln dust, lime kiln dust, clay slay, sodium silicate, calcium silicate, wood chips, ground corn cobs, diatomaceous earth, natural soil, or mixtures thereof; or (3) iron salts, ferrous sulfate, magnesium salts, silica, asphalt emulsions, alcohols, amides, amines, carboxylic acids, carbonyls, sulfonates, activated carbons, sodium carbonates, potassium permanganate, calcium hypochlorite, sodium hypochlorite, or mixtures thereof. (Joint Claim Constr. Brief at 4). However, the parties dispute the meaning of the term “additive slurry,” which appears multiple times throughout the claim. Plaintiff construes the term to mean a form of additive that promotes uniform mixing and reduces the potential for particulate emissions. (Pl.’s Brief at 43). Defendant, on the other hand, proposes a definition of a uniform, thin, watery mixture of a liquid, usually water, and any of several additives. (Def.’s Brief at 23).

The Court agrees with Defendant that an “additive slurry” must contain a watery mixture or liquid of some sort. The ‘731 Patent specification states that “[t]he additives are introduced into the dredged material 58 in the form of a slurry to promote uniform mixing and to reduce the potential for particulate emissions.” (DX 1 at A16, col. 6, lines 55-57). This language supports Plaintiff’s proposition that the *purpose* of the additive slurry is to promote uniform mixing and reduce the potential for particulate emissions. However, it does not describe the *composition* of an additive slurry. The specification repeatedly discusses an additive slurry in the context of being pumped into the dredged material, which implies that the slurry contains liquid. It states “[f]or example, the clarified water may be mixed with an additive slurry . . . and pumped into the dredged materials 28.” *Id.* at A16, col. 5, lines 27-29. Later, the specification discloses that “[t]he additives may be combined in the mixer to form a slurry that is pumped through supply lines 68 via pump 70 directly to the mixing assembly 56.” *Id.* at A16, col. 6, lines 52-55. Plaintiff cites the following specification language for the proposition that the additive slurry may be dry:

The additives are introduced into the dredged material 58 in the form of a slurry to promote uniform mixing and to reduce the potential for particulate emissions. It will be understood by one skilled in the ordinary art that *other methods for the transfer of dry additives from the silos 64 directly to the mixing assembly 56, such as pneumatic transfer or on a conveyor, may also be used* without departing from the principles of the present invention.

Id. at A16, col. 6, lines 55-62 (emphasis added). This language explains that dry additives may be used but does not suggest that the slurry itself remains dry. Therefore, the Court finds that the plain meaning of “additive slurry” requires a liquid mixture.

The patent’s prosecution history further supports Defendants’ construction. To overcome prior art, the patent applicant disclaimed or surrendered the use of dry additives. The word “slurry” was not included in the ‘731 Patent claims until the applicant’s final amendment. (DX 4 at A230). In the applicant’s accompanying remarks, he argues that “[t]he pending amended claims require the steps of creating an additive slurry in a mixing container and pumping the additive slurry from the mixing container to a mixing assembly disposed within the containment receptacle.” *Id.* at A242. The applicant distinguished prior art as “teach[ing] away from the Applicant’s present invention by adding dry additives which contribute to potentially harmful particulate emission.” *Id.* at 243. Based

on the foregoing, the prosecution history affirms that the patent applicant disavowed the use of dry additives in the term “additive slurry.”

Beyond the four corners of the patent specification and the prosecution history, the extrinsic evidence supports Defendant’s construction of “additive slurry.” Neither the patent specification nor the prosecution history provides a precise definition of “additive slurry.” Therefore, the Court may consider extrinsic evidence in the form of dictionary definitions. See Phillips, 415 F.3d at 1317. The Merriam-Webster Dictionary defines “slurry” as “a watery mixture of insoluble matter (as mud, lime, or plaster of paris).” (DX 12 at A679). The American Heritage Dictionary similarly defines the term as “[a] thin mixture of a liquid, esp[ecially] water, and any of several finely divided substances, such as cement, plaster of Paris, or clay particles.” Id. at A672. Furthermore, the patentee’s 1997 brochure describing his patented process specifies that all water removed from the barges in the dewatering process is used in preparing the slurry. (DX 11 at A649).

Finally, the Court finds Plaintiff’s construction of “additive slurry” unduly vague. In Geneva Pharmaceuticals, Inc. V. GlaxoSmithKline PLC, the Federal Circuit held that a patent claim is indefinite if a skilled artisan cannot determine if an accused product infringes. See 349 F.3d 1373, 1383-84 (Fed. Cir. 2003) (citation omitted). Furthermore, 35 U.S.C. § 112 requires a patent specification to “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” This statute seeks to allow third parties to design around and avoid actions which might infringe a patent. Under Plaintiff’s purely functional construction of the claim, a person of ordinary skill in the art would not know whether a particular composition of slurry falls within the scope of the patent or not because Plaintiff does not define the amount of water necessary to meet its definition. Therefore, the Court rejects Plaintiff’s construction of the term “additive slurry” in favor of Defendant’s narrower interpretation.

6. Mixing Container

Claim 1 of the ‘731 Patent includes the steps of “creating an additive slurry in a mixing container” and “pumping the additive slurry from the mixing container to a mixing assembly disposed within the containment receptacle” (DX 1 at A18, col. 10, lines 23-25). The parties dispute the meaning of “mixing container.” Plaintiff construes the term to mean a contained area, which does not have to be physically separate from the containment receptacle (Pl.’s Brief at 44-45). Defendant interprets “mixing container” to mean an apparatus, device, or structure that is separate and apart from the containment receptacle, wherein the additive(s) and water are held, while uniformly mixed to create the additive slurry. (Def.’s Brief at 24).

The Court agrees with Defendant that the mixing container must exist separately from the containment receptacle. The plain language of the claim supports this interpretation. The claim calls for creating an additive slurry in a mixing container and then pumping it to a mixing assembly within a containment receptacle. (DX 1 at A18, col. 10, lines 23-25). Thus, the invention requires three separate and distinct devices: a mixing container, a mixing assembly, and a containment receptacle. Defining a “mixing container” merely as a “contained area” does not indicate clearly to a third party to which of these three areas “mixing container” refers and violates the tenets of Geneva Pharmaceuticals, Inc. and 35 U.S.C. § 112. Furthermore, the figures that accompany the patent

specification show a separate device for mixing that connects to a mixing assembly by supply lines. (DX 1 at A2-A13). Figure 5 depicts a mixer that feeds to a pump that is connected by supply lines directly to the mixing assembly, which sits inside a containment receptacle identified as “treatment vessel 26.” Id. at A7.

The prosecution history affirms Defendant’s construction of “mixing container.” Following the Patent Examiner’s rejection of the patent applicant’s claims on three occasions, the Patent Examiner conducted an interview with the applicant on April 9, 2001 to consider his informal claim amendments. (DX 4 at A228). The Patent Examiner rejected the proposed amendments and gave the following explanation:

Applicant’s attorney proposed changes to claims 3, 7, 9, 11, 30, 35, 37 and 39 to further define the claim to recite that method steps of depositing the dredged material into a first vessel, creating an additive slurry in a second vessel and moving the additive slurry from the second vessel to the first vessel as recited in the proposed amendment faxed 4/9/2001 for the interview purpose. *However, examiner respectfully disagreed with applicant’s opinion because the first and second vessel for the dredged materials are broadly defined and the method of creating and moving the additive slurry from the first to second vessel appear not to be defined over the prior art.*

Id. (emphasis added). Thereafter, the patent applicant submitted a final amendment of claims on April 23, 2001. Id. at A240-53. In response to the Patent Examiner’s interview comments, the patent applicant redefined “first vessel” as “containment receptacle” and “second vessel” as “mixing container.” Id. at A228. In arguing for patentability, the applicant emphasized that “[a]n additive slurry is created in a mixing container which is separate from the containment receptacle.” Id. at A244. This language makes clear that the applicant disavowed any claim construction inconsistent with the mixing container existing separate and apart from the containment receptacle. The patent applicant confirmed this disavowal in his repeated argument that “[t]he pending amended claims require the steps of creating an additive slurry in a mixing container and pumping the additive slurry from the mixing container to a mixing assembly disposed within the containment receptacle.” Id. at A242-43. Ultimately, the amended claims issued as the claims of the ‘731 Patent.

Plaintiff mischaracterizes the prosecution history to suggest that the claim terms do not require the mixing container and containment receptacle to be separate vessels. Plaintiff interprets the Patent Examiner’s April 9, 2001 interview summary as concluding that creating an additive slurry in a separate vessel and moving it to a first vessel was not a patentable method. This is not accurate. The interview summary rejects the amendments because “the first and second vessel . . . are broadly defined and the method of creating and moving the additive slurry from the first to second vessel appear not to be defined over the prior art.” Id. at A228. The Patent Examiner rejected the amendments because the *method* of moving additive slurry from one vessel to another was not defined over the prior art, not because it required the use of two separate vessels. Indeed, when the applicant submitted revised amendments on April 23, 2001 more narrowly defining one

vessel as a “containment receptacle” and the second as a “mixing container,” the Patent Examiner accepted the modifications and issued the patent.

Furthermore, the Court disagrees with Plaintiff’s assertion that a separate mixing container is only a preferred embodiment. Plaintiff cites the following statement made by the patent applicant in response to the Patent Examiner’s April 9, 2001 interview:

In the preferred embodiment of the present invention, the containment receptacle is shown to be a barge of [sic] scow. The dredged material deposited into the containment receptacle remains therein during the step of removing the free water from the dredged material. An additive slurry is created in a mixing container which is separate from the containment receptacle. The additive slurry is pumped from the mixing container to a mixing assembly which is disposed within the containment receptacle to mix the dredged material with the additive slurry to form a substantially homogenous mixture.

(DX 4 at A243-44) (emphasis added). However, the preferred embodiment discussed above refers to a containment receptacle taking the form of a barge or scow, not whether the containment receptacle exists separately from the mixing container. Plaintiff’s interpretation of the prosecution history stretches the plain meaning of the term. Accordingly, the Court upholds Defendant’s construction of “mixing container” as an accurate reflection of the patentee’s intent.

7. Pumping

Claim 1 of the ‘731 Patent contains the step of “pumping the additive slurry from the mixing container to a mixing assembly disposed within the containment receptacle . . .” (PX 1 at A18, col. 10, lines 24-26). The parties dispute the meaning of “pumping.” Plaintiff argues that the term means mechanically transferring, conveying, or moving. (Pl.’s Brief at 51). Defendant defines “pumping” as transferring a watery mixture by a pump. (Def.’s Brief at 26). Defendant also interprets the entire element as requiring the slurry to be pumped *directly* to the mixing assembly. *Id.* at 28-29 (emphasis added). Plaintiff opposes this limitation.

Defendant’s construction of the term “pumping” as requiring an actual pump is supported by the plain language of the patent and the accompanying specification. The specification teaches that “[t]he additives may be combined in a mixer 66 to form a slurry *that is pumped through supply lines 68 via pump 70* directly to the mixing assembly 56.” (DX 1 at A16, col. 6, lines 52-55) (emphasis added). The specification states further that “[d]uring the treatment process, a slurry of additives may be pumped into the dredged materials 28 as the mixing assembly 56 rotates, thereby transforming the dredged materials 28 into a homogenous mixture 60.” *Id.* at A16, col. 6, lines 15-18. This language establishes that the pumping action must occur via a pump and not some other device.

Plaintiff argues that a pump is merely a preferred method of pumping. Accordingly, Plaintiff cites specification language that states “additives *may* be combined in a mixer 66 to form a slurry

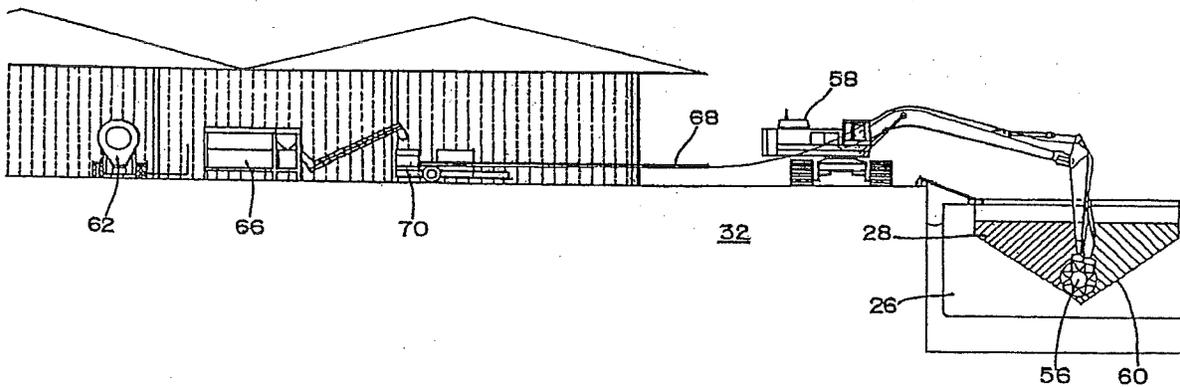
that is pumped through supply lines 68 via pump 70" *Id.* at A16, col. 6, lines 52-54 (emphasis added). However, the claim does not recite the step of moving the additive slurry by pneumatic transfer or conveyor but instead plainly recites "pumping." The Court also reads the word "may" as referring to combining additives in a mixer, not of pumping slurry via pump. There is no indication here that the patentee intended this language to make a pump a preferred embodiment rather than a required mechanism. Plaintiff goes on to cite specification language stating: "[i]t will be understood by one skilled in the art that other methods for the transfer of dry additives . . . directly to the mixing assembly 56, such as pneumatic transfer or via a conveyor, *may* also be used without departing from the principles of the present invention." *Id.* at A16, col. 6, lines 58-62 (emphasis added). Plaintiff also points to Figure 2 of the '731 Patent specification as showing that an additive slurry may be formed in a mixer 66, then pumped through a supply line 68 using a pump to the mixing assembly 58, or, alternatively, that a dry additive may be transferred to the mixing assembly 56. (Pl.'s Brief at 52). According to Plaintiff, this figure and its accompanying description in the patent specification indicate that the material to be pumped could be either a dry additive or an additive slurry. *Id.* Thus, the pumping action need not occur by means of an actual pump, which only moves wet material. *See id.* The Court observes that the language Plaintiff cites above relates to means of moving dry additives, such as by pneumatic transfer or conveyor. Claim 1 of the '731 Patent does not cover such methods because it is directed to an "additive slurry," not "dry additives." Therefore, Plaintiff has stretched the meaning of "pumping" beyond its ordinary meaning, and the Court cannot accept its overly broad interpretation of the term.

The '731 Patent prosecution history substantiates Defendant's interpretation of the term. The patent did not include the "pumping" limitation until the final amendment of the claims. The patentee added the term in response to the Patent Examiner's rejection of the term "moving" during the April 9, 2001 interview. (*See* DX 4 at A246). Specifically, the patent applicant first proposed "moving the additive slurry from the second vessel to the first vessel." *Id.* at A234. After the Patent Examiner rejected this language as not defined over prior art, the applicant replaced "moving" with "pumping" in order to narrow the term. *Id.* at A246. On three separate occasions in his remarks accompanying the amendment, the patent applicant distinguished the claimed invention from the cited prior art by stating: "[t]he pending amended claims require . . . *pumping* the additive slurry from the mixing container to a mixing assembly disposed within the containment receptacle." *Id.* at A242-44 (emphasis added). In so doing, the applicant surrendered any method of moving the additive slurry other than by pumping.

The Court also agrees with Defendant that the slurry must be pumped *directly* to the mixing assembly. In the informal amendments the patent applicant submitted to the Patent Examiner prior to the April 9, 2001 interview, the applicant proposed the element of "*moving* the additive slurry from the second vessel *to the first vessel*." (DX 4 at A234) (emphasis added). The final amendment modified the phrase to state "*pumping* the additive slurry from the mixing container *to a mixing assembly* disposed within the containment receptacle" *Id.* at A250 (emphasis added). The applicant made the change in response to the Patent Examiner's objection that the method of moving and creating the slurry were not defined over prior art. *See id.* at A228. By this amendment, the applicant disavowed simply depositing the slurry into the containment receptacle and adopted a specific method and destination for the slurry: "pumping" and "mixing assembly" respectively. If the applicant had not intended for the slurry to be pumped directly to the mixing assembly, he could

have claimed the process of pumping the additive slurry to the containment receptacle. Instead, the applicant chose to narrow the claims in order to gain their issuance. Indeed, the patent specification states that the additive slurry “is pumped through supply lines 68 via pump 70 directly to the mixing assembly 56.” (DX 1 at A16, col. 6, lines 53-55). Figures 2, 5, 7, and 8 also show a supply line 68 running from the mixing container 66, to the mixing apparatus 58, and down the arm of the mixing apparatus to the mixing assembly 56. *Id.* at A4, A7, A9, A20. Based upon the foregoing, the Court agrees with Defendant that the additive slurry must be pumped directly to a mixing assembly. Figure 5 is depicted below:

FIG.5



8. Mixing Assembly

The parties dispute the meaning of “mixing assembly” as used in claim 1 of the ‘731 Patent. This term appears in the element discussed above, which recites the step of “pumping the additive slurry from the mixing container to a mixing assembly disposed within the containment receptacle” *Id.* at A18, col. 10, lines 24-26. Plaintiff argues that the term refers to any apparatus capable of mixing and does not limit its location. (Pl.’s Brief at 54). Defendant defines “mixing assembly” as a device for mixing the additive slurry into the dredged materials, the mixing assembly positioned within the containment receptacle. (Def.’s Brief at 27).

While the Court does not see any material difference in the parties’ construction, it finds that Defendant’s interpretation more closely reflects the plain language of the patent. The primary difference between the two definitions is that Defendant’s requires the mixing assembly to sit inside the containment receptacle and Plaintiff’s does not. The plain language of the element describes a “mixing assembly disposed within the containment receptacle” (PX 1 at A18, col. 10, lines 25-26). Defendant’s proposed definition gives meaning to all of the terms in the element. Plaintiff even concedes that “[t]o the extent that the mixing assembly is disposed within the container receptacle, TDM’s claim term construction that the mixing assembly is placed in the containment receptacle does not appear at issue.” (Pl.’s Reply Brief at 25). Accordingly, the Court adopts Defendant’s interpretation of “mixing assembly.”

9. Substantially Homogenous Material

Claim 1 of the ‘731 Patent contains the step of “mixing the additive slurry into the dredged material to form a substantially homogenous mixture” (PX 1 at A18, col. 10, lines 27-28). The parties dispute the meaning of “substantially homogenous mixture.” Plaintiff defines the element in its entirety as combining or blending the additive slurry with the dredged material to form a mixture that is more consistent and uniform than it was before mixing. (Pl.’s Brief at 54). According to Plaintiff, the ‘731 Patent specification does not require any specific degree or amount of mixing under the claims. *Id.* Defendant argues that “substantially homogenous mixture” means a mixture in which additive slurry is uniformly distributed throughout the dredged material. (Def.’s Brief at 29).

The Court agrees with Defendant’s definition requiring uniform distribution of the additive slurry. The patent specification explains that “a slurry of additives may be pumped into the dredged materials 28 as the mixing assembly 56 rotates, thereby transforming the dredged materials into 28 a homogenous mixture 60.” (PX 1 at A16, col. 6, lines 16-19). The specification goes on to disclose two benefits of creating an additive slurry: “promot[ing] uniform mixing and . . . reduc[ing] the potential for particulate emissions.” *Id.* at A16, col. 6, lines 56-57. Thus, the purpose and function of the claimed invention support Defendant’s interpretation. The specification later explains that:

in order to beneficially re-use the dredged materials 28, additives such as Portland Cement are blended thoroughly into the dredged materials 28 to form a substantially homogenous materials 69 [sic]. This treatment process chemically and physically alters, through fixation, solidification

and stabilization, the finer elements of the dredged material 28 so that, upon hydration, the material 69 gains structural strength

Id. at A17, col. 8, line 65-A18, col. 9, line 5. This disclosure make clear that the “substantially homogenous mixture” results from the uniform mixing and thorough blending of the additive slurry and dredged material. Plaintiff’s construction does not require the additive slurry to be thoroughly blended with the dredged material so long as the distribution becomes incrementally more uniform from mixing. This interpretation essentially vitiates the term “substantially” by requiring only a minimal improvement in uniformity of the mixture. If the Court were to adopt Plaintiff’s definition, mixing of the additive might increase its distribution but fail to achieve the goal of chemically and physically altering the dredged material as a whole.

10. Curing

Claim 1 of the ‘731 Patent contains the step of “curing the substantially homogenous mixture in the containment receptacle, thereby producing a structural fill material and reducing particulate emissions.” Id. at A18, col. 10, lines 29-31. The parties dispute the term “curing.” Plaintiff argues that the term means simply allowing enough time for the mixture to solidify and stabilize. (Pl.’s Brief at 55). Defendant contends that it means allowing for chemical fixation, stabilization and solidification reactions, caused by the additive slurry, to occur. (Def.’s Brief at 30).

The Court adopts Plaintiff’s construction of the term because it more clearly reflects the language in the patent specification. The patent specification states:

Mixing of the additives into the dredged material is accomplished using a mixing assembly which may have horizontal or vertical mixing systems. Thereafter, the curing process effectively completes the dewatering of the dredged materials . . . and creates a highly impermeable structural fill material which may be used as a cap for a landfill, as the site for the construction of a building or as a paving material for parking lots, airfield construction, road base or other Department of Transportation projects.

(PX 1 at A14, col. 2, line 62-A15, col. 3, line 5). This language merely describes the intended goal of the curing process, which is to produce a structural fill material and reduce particulate emissions. Nothing in the specification limits the result of curing to chemical fixation, stabilization, and solidification reactions, as Defendant suggests. Indeed, Defendant’s interpretation of the patent specification impermissibly reads a limitation into the claim. Defendant emphasizes that the ‘731 Patent Abstract describes the invention as a “method for treating materials” to “stabilize the dredged materials by chemical fixation and solidification to form the structural fill.” Id. at A2. However, the language actually discloses “[a] method for treating materials dredged from a waterway, such as a harbor or channel, and forming a mixture suitable for beneficial re-use as a structural fill.” Id. The Abstract only discusses chemical fixation and solidification in the context of the fixation, stabilization and solidification stage, which is separate and distinct from the curing stage. See id. Next, Defendant offers as support for its construction language in the specification stating that “[t]he fixation, stabilization and solidification process . . . physically and chemically transforms the dredged

materials into a structural fill” *Id.* at A15, col. 3, lines 13-15. Once again, this statement indicates that the fixation, stabilization and solidification process, not the curing process, requires physical or chemical transformation to occur. The Court will not impute limitations on the definition of “curing” where the patentee did not so intend.

Defendant claims that the prosecution history supports its case. According to Defendant, the prosecution history dictates the method of “chemical fixation” because the patent applicant distinguished his use of the term “curing” from the Kapland Patent’s use of “basifying” by arguing that “curing” is “the technical term for perfecting through chemical change.” (DX 4 at A210). Defendant also cites language in the applicant’s statement stating that “[f]urther demonstrating that the ‘121 [Kapland] patent is not a chemical reaction is *the absence of any mention of solving the problem of the fines of the dredged materials drying out and blowing away as dust.*” *Id.* (emphasis added). The Court reads this prosecution history as distinguishing “curing” from “basifying,” not as surrendering or disavowing any subject matter. The patentee made no statement to indicate otherwise. Therefore, the Court adopts Plaintiff’s construction of the term “curing.”

1.1. Structural Fill Material

The final term of the ‘731 Patent in dispute is “structural fill material,” which appears in the preamble and final step of the claim. Plaintiff asserts that it means fill material that may be used as: (1) a cap for a landfill; (2) the site for the construction of a building; (3) paving material for parking lots, airfield construction, road base or other Department of Transportation Projects; (4) material suitable for beneficial reuse as an engineered structural fill material; (5) a liner protective cover; (6) a daily cover or final cover over a landfill; (7) strip mine reclamation; (8) a cap for Brownfield property or in another environmental remediation plan; (9) beach nourishment; (10) habitat development projects; (11) other beneficial uses; or (12) other uses requiring the use of structural fill. (Pl.’s Brief at 56).

Defendant contends that the term means a soil-like material suitable for beneficial reuse, with improved structural or compressive strength and reduced wind-borne fugitive dust emissions. (Def’s Brief at 18). Defendant offers several provisions in the patent specification in support of its argument that a “structural fill material” must have an improved structural strength and reduced windborne fugitive dust emissions. First, the specification states that the invention “relates . . . in particular to, a method for processing the dredged materials to form a mixture suitable for a beneficial re-use as a structural fill material.” (DX 1 at A14, col. 1, lines 11-15). The specification elaborates that:

This treatment process chemically and physically alters, through fixation, solidification and stabilization, the finer elements of the dredged material 28 so that, upon hydration, the material 69 gains structural strength and a soil-like material while minimizing the likelihood of wind-born fugitive dust emissions.

Id. at A18, col. 9, lines 1-6. In Defendant’s view, this language demonstrates that the claimed method creates an end-product with improved structural strength and minimized dust emissions as

a result of curing the substantially homogenous mixture. Finally, Defendant maintains that the prosecution history shows that the patent applicant surrendered any construction of “structural fill material” that did not have these two properties. The patent applicant distinguished the proposed claim over prior art by explaining that “[t]he resulting material [from Miyoshi] has a compressive strength significantly less than that disclosed by the Applicant.” (DX 4 at A182). He also referenced the Kapland Patent’s lack of “any mention of solving the problem of the fines of the dredged materials drying out and blowing away as dust.” *Id.* at A210.

The Court agrees with Plaintiff that the term “structural fill material” is not limited to a soil-like material suitable for beneficial reuse. The patent specification itself describes a myriad of uses for structural fill material, including all of those listed by Plaintiff in its proposed definition. (PX 1 at A15, col. 3, lines 1-5; A18, col. 9, lines 57-67). Nothing in the specification language Defendant cites above *requires* a structural fill material to have improved structural or compressive strength and reduce wind-borne fugitive dust emissions. On the contrary, it merely describes the *purpose* of the invention as a whole: to form a mixture suitable for a beneficial reuse as a structural fill material. The patentee has not made a clear and unmistakable disavowal or intentional disclaimer of the term. Accordingly, the Court will not read a limitation into the claim absent the patentee’s intent. *Tx. Instruments Inc.*, 988 F.2d at 1171 (citation omitted).

Finally, Defendant attempts to narrow the meaning of the last step in the ‘731 Patent process as a whole beyond the plain meaning of the claim. The step recites as follows: “curing the substantially homogenous mixture in the containment receptacle, *thereby* producing a structural fill material and reducing particulate emissions.” (PX 1 at A18, col. 10, lines 29-31) (emphasis added). Defendant argues that the element’s use of the word “thereby” in conjunction with the curing step confirms that the act of curing is what yields structural fill and reduced particulate emissions. (Def.’s Brief at 32). Plaintiff objects to this reading and asserts that the use of the word “thereby” merely explains that producing a structural fill material and reducing particulate emissions occur as a result of the entire patented process, not the curing step alone. (Pl.’s Reply Brief at 29). The Court agrees with Plaintiff that the curing step is not limited by the requirement that it produce a structural fill material and reduce particulate emissions. The patent specification describes these twin results in the context of the dredging process as a whole. For example, the specification states that additives are introduced into the dredged material in the form of a slurry to reduce the potential for particulate emissions; dredged materials are not moved from the containment receptacle to reduce particulate emissions; and the mixing of additives is necessary to obtain a structural fill. (PX 1 at A15, col. 3, lines 6-8; A16, col. 6, lines 55-57, 63-66). For this reason, the Court will not infer limiting language into the curing step of claim 1.

Conclusion

The Court has interpreted in this decision the disputed terms of the '614, '862, and '731 Patents. Counsel for the parties are requested to submit a joint status report to the Court on or before March 13, 2009 providing a proposed schedule for further proceedings.

IT IS SO ORDERED.

s/ Thomas C. Wheeler
THOMAS C. WHEELER
Judge



May 8, 2008

William Ellis
Port Authority NY NJ
Port Commerce
225 Park Avenue South, 11th Floor
New York, New York 10003

Dear Mr. Ellis:

Enclosed please find duplicate copies of transmittals pertaining to Noticing and the delivery of the White Paper as originally provided on or about May 27th, 2005 to Kenneth J. Ringer, Jr on behalf of UTEX through the Honorable US Senator Orrin G. Hatch; and as further supplemented on September 29, 2005 and October 12, 2005 in correspondence to John Berry Esq. at the Port Authority through our counsel Garrubbo, Capece, D'Arcangelo, Millman & Smith, P.C.

Should you have any questions regarding the materials or wish to have additional materials provided for, please feel free to contact our office.

Sincerely,

A handwritten signature in black ink that reads "Rick Redle". The signature is written in a cursive style with a long, sweeping underline.

Rick Redle
Sr. Vice President

RR/ea

Enclosures

cc: Frank Capece
Ritchie G. Studer

Garrubbo, Capece, D'Arcangelo, Millman & Smith, P.C.

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+ ADMITTED BY THE SUPREME COURT OF NEW JERSEY AS A CIVIL-TOLM ATTORNEY
* ALSO MEMBER OF N.J. BAR
** ALSO MEMBER OF N.Y. BAR
*** ALSO MEMBER OF NY BAR

September 26, 2005

VIA FEDEX Tracking # 853550996185

John Berry Esq.
225 Park Avenue South
14th Floor
New York, NY 10003

*Second Set of
White papers Sent
4 set.*

Dear Mr. Berry:

*HAND DELIVERED
PER CAPECE
Rid*

In preparation of our meeting on Friday September 29, 2005, I am providing you with summary material. In addition to myself and Ritchie Studer, I have asked an additional principal at UTEX Environmental Services, LLC.

The essence of the material is to set out the basis of the claims of intellectual property and patent rights by UTEX.

In summary fashion the material sets forth dredge treatment technologies employed by the NY & NJ Port Authority both individually as well as jointly with the Army Corps of Engineers. You will note from the information that significant volumes of contaminated sediments have been processed and beneficially placed upland in recent years with anticipation of considerable volumes to continue for the foreseeable future. It is also apparent that the present lowest cost and environmental sound methodologies for processing and upland placement for beneficial reuse employs technology owned by UTEX.

Our review of the dredging activities reveals that your agency has contracted and continues to contract for contaminated dredging treatment for berths and channels leading from the berths to the federal channels. I have enclosed contracts for your review, regarding joint efforts of your agency and the Army Corps of Engineers. In all cases the

contaminated dredge treatments operations are common to both federal, non-federal and joint federal and port sponsored projects.

At our meeting I believe it would be helpful to summarize for you the efforts to resolve the issues directly with the Army Corps Engineers by UTEX.

Very truly yours,



FRANK G. CAPECE

FGC:ck
Encl.

Garrubbo, Capece, D'Arcangelo, Millman & Smith, P.C.

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CIVIL TRIAL ATTORNEY
* ALSO MEMBER OF FL BAR
** ALSO MEMBER OF PA BAR
*** ALSO MEMBER OF NY BAR

October 12, 2005

Mr. Herbert S. Somewitz
Chief of Contracts Law Department
Port Authority of NY & NJ
225 Park Ave., South, 14th Floor
New York, NY 10003

RE: UTEX Dredge Treatment Patents

Dear Mr. Somewitz:

In response to our meeting on September 29th, we have assembled the enclosed data for your review. Enclosed you will find:

- Five copies of Gibbons, Del Deo, Dolan, Griffinger & Vecchine's opinion and analysis of various patents owned by UTEX Holdings, LLC through its wholly owned subsidiary TDM America, LLC. Specifically, the patent analysis and resulting opinion confirms that dredging and treatment methods being employed by contractors providing services to Port Authority under their issued contracts have literally infringed on UTEX owned technology. Included with the opinion letter are copies of the referenced patents and related patents owned by TDM America LLC, a UTEX wholly owned company. The correspondence are applicable to Port issued and managed contracts.
- Five copies of Port Authority's Dredging Fact Sheet evidencing some 26 separate berth dredging contracts completed from 1999 through 2004. We believe most of these contracts are subject to the referenced patent opinion letter.
- Copies of eight Port Authority contracts that evidence specific upland disposal and treatment subject to the enclosed patent infringement opinion letter. (One complete and 4-pertainant reference copies)
- A copy of initial noticing correspondence to the Port Authority in September of 1997, which was the initial petitioning for intellectual patent pending status on what later became issued patent 6,293,731.

As you maybe aware, in April of this year we presented similar data to the Army Corp of Engineers. We currently have initiated dialogue with counsel of the ACE involving their contracts within the federal channels of the Port. It is our understanding the ACE is currently evaluating their position on this matter. What is unclear to us is if the ACE is representing the Port Authority's interest in the Federal Contract - Federal Channels. We would appreciate your confirmation pertaining to the ACE's representations on these matters.

With respect to contracts issued by the Port Authority for dredging that involved upland treatment and disposal, we have enclosed evidence of historical and current use of UTEX's technologies by Port Authority contractors. It is apparent that through the development of dredge treatment methodologies, UTEX's patented techniques and methods have been found to be the most environmentally sound and of the lowest cost alternative for upland disposal of contaminated sediments. It is our desire to continue to make our treatment methods available to the Port Authority through a joint dispute resolution process which could include an agreed stand down period with reservation of all rights. We will make ourselves available to you and your staff as you research these matters. We are prepared to employ and maintain an open dialogue as we search for a resolution that is historically fair for UTEX and beneficially helpful as the Port Authority moves forward.

It is our desire to establish a time frame for furthering these discussions and as such we would appreciate understanding what would be the appropriate steps for continuing the dialog.

Sincerely,

A handwritten signature in black ink, appearing to read "Frank G. Capece Esq.", with a horizontal line through the middle of the letters.

Frank G. Capece Esq.

Cc: Ritchie G. Studer
Rick R. Redle

WARREN & PEREZ

Berkshire Court
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Email: firm@warper.com

Specializing in Patents,
Trademarks, Copyrights, Trade
Secrets and related litigation

September 4, 1997

Mr. Francis J. Lombardi, P.E.
Chief Engineer
The Port Authority of New York & New Jersey
One World Trade Center
New York, NY 10048

Re: In-situ Stabilization of Dredged Materials
Our File No.: 1800-2025
Method for Treatment of Dredged Materials to Form a Structural Fill
Our File No.: 1800-2026

Dear Mr. Lombardi:

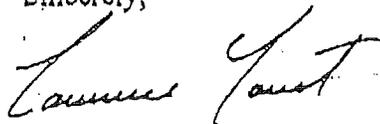
This correspondence is intended to notify all pertinent parties regarding the patent pending status of the above-referenced patent applications that were filed by our firm with the United States Patent and Trademark Office on May 15, 1997.

The respective rights, title and interest in the same are jointly held by ECDC Environmental, L.C., a Utah Limited Liability Company ("ECDC") and Investment Resource Management, L.P., a Delaware Limited Partnership ("ITEX").

These patent applications cover various aspects of the proprietary technology currently used by ECDC and ITEX in the performance of dredging and processing operations in New Jersey. Upon issuance of the patents, the unauthorized use of this technology by third parties will constitute patent infringement.

Should you have concerns regarding potential infringement by third parties, please contact our offices.

Sincerely,



Lawrence R. Youst

LRY/mg



Orrin G. Hatch
United States Senator
104 Hart Senate Office Building
Washington, D.C. 20510
Telephone: (202) 224-5251
Facsimile: (202) 224-6331



TO: Frank Caprice
FYI Redle

FACSIMILE TRANSMISSION COVER SHEET

TO: Rick Redle 972.931-2218

OFFICE: _____

FROM: J. J. Brown (202) 224-9858

DATE: _____ TIME: _____

TELECOPIER NO: _____

OFFICE TELEPHONE NO: _____

TOTAL NUMBER OF PAGES: _____
(INCLUDING COVER SHEET)

COMMENTS: letter attached - all copies
Sent out thru senate mail,
not FedEx. It's slower, but
complies with correct ethical standards
for senate correspondence.

B

ORRIN G. HATCH
UTAH

PATRICIA KNIGHT
CHIEF OF STAFF

104 Hart Senate Office Building

TELEPHONE: (202) 224-5251
TDD (202) 224-2849
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Website: <http://www.senate.gov/~hatch>

United States Senate

WASHINGTON, DC 20510-4402

May 24, 2005

COMMITTEES:

FINANCE

JUDICIARY

HEALTH, EDUCATION,
LABOR, AND PENSIONS

INTELLIGENCE

JOINT COMMITTEE
ON TAXATION

Lieutenant General Carl A. Strock
Commander and Chief of Engineers
United States Army Corps of Engineers
441 G Street, NW
Washington, DC 20314

Colonel Richard J. Polo, Jr.
Commander and District Engineer
United States Army Corps of Engineers
New York District
26 Federal Plaza
New York, NY 10278-0090

Dear Lieutenant General Strock and Colonel Polo:

I am writing with regard to the Army Corps of Engineers dredge and sediment management contracts. It appears that the practices of some Army Corps of Engineers contractors may be unfairly damaging a Utah company.

As you may be aware, UTEX Environmental Services is a Utah-based environmental and waste management company. UTEX has broad experience with multiple proprietary treatment procedures, many of which have been and continue to be utilized for the treatment and management of contaminated dredge sediments. It has come to my attention that some Army Corps of Engineers dredge treatment contractors may be utilizing patented techniques exclusively owned by UTEX.

I recognize the importance of maintaining the competitive balance within the very limited number of contractors capable of providing necessary dredge and sediment removal services. I also understand the importance of proper protection of patented technologies. In an effort to resolve this matter, UTEX's principals are interested in meeting with you to further discuss their concerns. UTEX has provided the enclosed materials to assist you and your staff in fully understanding the company's position.

It is my understanding that several new contracts will be awarded by the Army Corps of Engineers in the coming months that will contain large amounts of contaminated dredge sediments that are planned to be treated and disposed of upland. I also am

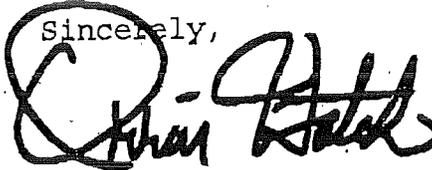
May 24, 2005

Page 2

aware that several contracts are currently underway or will soon commence which have significant amounts of dredge sediments to be treated and disposed of upland. As the contractors managing these projects may be unfairly applying UTEX's patented technologies, I hope you will be able to meet with members of UTEX to discuss this matter with them.

Thank you for your attention to this matter. To set up a meeting with UTEX, please contact Scott Crawford, UTEX's Director of Engineering, at 801-732-2000. Also, for further information, please feel welcome to contact J.J. Brown of my staff at (202) 224-5251.

Sincerely,



Orrin G. Hatch
United States Senator

OGH:jajj
Enclosure

CC:
Mr. Kenneth J. Ringler, Jr.
Executive Director
The Port Authority of New York and New Jersey
225 Park Avenue South
New York, NY 10003

GIBBONS, DEL DEO, DOLAN, GRIFFINGER & VECCHIONE
A PROFESSIONAL CORPORATION

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WEB SITE
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April 4, 2005

The Honorable Orrin G. Hatch
United States Senate
104 Hart Office Building
Washington, D.C. 20510

**Re: Analysis of Certain Patents Assigned to UTEX and/or its Subsidiaries
Our Ref. 105707-53225**

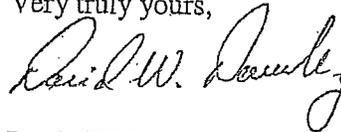
Dear Senator Hatch:

On behalf of this firm's client, UTEX Holdings, LLC ("UTEX"), we have analyzed various patents assigned to UTEX and/or its subsidiaries.

The analysis that we conducted is in conformance with that required by a pre-filing investigation prior to initiating a patent infringement suit in the federal courts. See Fed. R. Civ. P. 11. Specifically, the patents included in the attached analysis were compared to various dredging facilities and activities which have been investigated, photographed and analyzed. Based upon the information provided to us, it was our conclusion that many of our client's patents were literally infringed or if not literally infringed, then infringed under the doctrine of equivalents, by the aforementioned dredging facilities and activities.

If we could provide any further information, please do not hesitate to contact us. Thank you for your attention to this matter.

Very truly yours,



David W. Denenberg

DWD/gs

#98478 v1
105707-53225

**ANALYSIS BY COUNSEL OF CERTAIN PATENTS AND DREDGING
ACTIVITIES FOR UTEX ENVIRONMENTAL SERVICES, LLC AND FOR
PRESENTATION TO THE UNITED STATES ARMY CORPS OF ENGINEERS**

This analysis and report is prepared for UTEX Environmental Services, LLC ("UTEX"). This analysis and report evaluates United States Patent Nos. 6,293,731 ("the '731 patent"), 5,542,614 ("the '614 patent") and 5,931,605 ("the '605 patent") against certain dredging activities being conducted pursuant to contracts awarded by the United States Army Corps of Engineers ("USACE"). It is counsel's understanding that this report is being provided to the USACE for purposes of confidential discussions and meetings related to these patents and the above activities. This memo should therefore be treated as confidential pursuant to settlement negotiations in accordance with Rule 408 of the Federal Rules of Evidence.

I. The Law of Patent Infringement

A. Infringement Generally

The definition of patent infringement is set forth in 35 U.S.C. §271(a) which provides, in pertinent part, that:

[W]hoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States...during the term of the patent therefor, infringes the patent.

An infringement analysis requires two steps: "First, the court must construe the claims ... to establish their meaning and scope. Second, the claims as construed are compared to the allegedly infringing device." *Texas Instruments Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1563 (Fed. Cir. 1996), cert. den'd., 520 U.S. 1228 (1997), cit. omit. See also, *Lockheed Martin Corp. v. Space Systems/Loral, Inc.*, 324 F.3d 1308, 1318 (Fed. Cir. 2003).

B. Literal Infringement

Infringement may be either literal or via what is termed the "doctrine of equivalents." Literal infringement exists when each and every limitation in an asserted claim is found in the accused device. See, e.g., *Catalina Mktg., Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 812 (Fed. Cir. 2002); *Riles v. Shell Exploration and Production Co.*, 298 F.3d 1302, 1308 (Fed. Cir. 2002).

C. Infringement Under the Doctrine of Equivalents

"[A] product or process that does not literally infringe...a patent claim may nonetheless be found to infringe if there is 'equivalence' between the elements of the accused product or process and the claimed elements of the patented invention." *Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 21 (1997).

An element in the accused product is equivalent to a claim limitation if the differences between the two are "insubstantial" to one of ordinary skill in the art, that is, whether the missing element in the accused device "performs substantially the same function in substantially the

same way to obtain the same result” as the claim limitation. *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 608 (1950); see also, *Warner-Jenkinson*, 520 U.S. at 39-40. However, “the question of insubstantiality of the differences is inapplicable if a claim limitation is totally missing from the accused device.” *Eagle Comtronics, Inc. v. Arrow Commun. Labs., Inc.*, 305 F.3d 1303, 1315 (Fed. Cir. 2002), cert. den’d., 123 S.Ct. 995 (Jan. 27, 2003). Also, under the all elements rule, if a claim limitation is not met by a corresponding element in the accused device, or an equivalent, then a finding of infringement under the doctrine of equivalents, is precluded. See *Lockheed Martin Corp*, 324 F.3d at 1321.

The availability and scope of the doctrine of equivalents may be limited by the application of prosecution history estoppel. “Prosecution history estoppel prevents a patentee from recapturing under the doctrine of equivalents claim scope surrendered during prosecution.” *Sofamor Danek Group, Inc. v. DePuy-Motech, Inc.*, 74 F.3d 1216, 1222 (Fed. Cir. 1996), cit. omit.

The Supreme Court has addressed the estoppel effect of claim amendments made during the course of patent prosecution. Under *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002), subject matter surrendered by a narrowing claim amendment is examined to determine the availability of the doctrine of equivalents. 535 U.S. at 736-7. A rebuttable presumption exists that the narrowing amendment surrendered the particular equivalent in question. *Id.* at 740. The presumption may be overcome by showing that: (i) the asserted equivalent was unforeseeable, (ii) the rationale for the amendment is only tangentially related to the equivalent in question, or (iii) there is some other reason that the patentee could not reasonably be expected to have described the asserted equivalent. *Id.* at 740-1.

D. Claim Construction

The Federal Circuit has explained that:

[I]n interpreting an asserted claim, the court should look first to the intrinsic evidence of record, i.e., the patent itself, including the claims, the specification and, if in evidence, the prosecution history. Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language.

Vitronics Corp. v. Conceptoronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996) cit. omit. There is also “extrinsic evidence,” which is “external to the patent and file history, such as expert testimony, inventor testimony, dictionaries, and technical treatises and articles.” *Id.* at 1584. Where intrinsic evidence is unambiguous, it is improper to rely on extrinsic evidence in claim construction, except to explain -- but not alter -- the intrinsic evidence. *Id.* at 1583.

Claim terms will be given their ordinary and customary meaning, unless the inventor appeared to use them differently. See *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 326 F.3d 1215, 1220 (Fed. Cir. 2003).

“The written description part of the specification itself does not delimit the right to exclude. That is the function and purpose of claims.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), *aff'd.*, 517 U.S. 370 (1996); see, also, *Electro Med. Sys. S.A.*

v. Cooper Life Sciences, Inc., 34 F.3d 1048, 1054 (Fed. Cir. 1994). If “the meaning of a claim term is in doubt, [the Court should] look to the specification for guidance.” *N. Amer. Vaccine, Inc. v. American Cyanamid Co.*, 7 F.3d 1571, 1576 (Fed. Cir. 1993), *cert. den’d.*, 511 U.S. 1069 (1994).

II. UTEX’s Patents

The claims of the ‘731, ‘614 and ‘605 patents have been analyzed against dredging activities currently being conducted pursuant to USACE contracts. That analysis compares the claims to the dredging activities currently being conducted by DONJON Marine. Co. (“DONJON”), OENJ Corporation (“OENJ”) and Clean Earth Dredging Technologies, Inc. (“CEDTI”).

For this analysis, this office applied the plain meaning of the language of the claims.

A. The ‘731 Patent

The ‘731 patent, entitled “Method for Treatment of Dredged Materials to Form a Structural Fill,” was issued on September 25, 2001, claiming priority from a provisional application filed May 15, 1997. Generally, the claims and the disclosure are directed to a method for producing structural fill by treating materials dredged from a waterway and forming a mixture suitable for beneficial re-use as structural fill. The method includes obtaining dredged material, containing the dredged material, dewatering, creating an additive, and pumping the additive into the containment area, and then mixing and curing the additive and the dredged material to produce the structural fill.

Each of the elements of at least claim 1 of the ‘731 patent is literally found in the activities being conducted by DONJON pursuant to contract no. W912DS-05-C-0003. This is demonstrated in photographs, which are available upon request.

Claim 1 of the ‘731 Patent	DONJON’s Activities
A method for producing a structural fill material comprising the steps of:	The purpose of DONJON’s activities is to produce a structural fill material. <i>(DONJON Photo #1)</i>
obtaining a dredged material;	Photographs confirm that DONJON is conducting dredging activities. Those activities include obtaining dredged materials from the harbors in accordance with DONJON’s USACE contract. <i>(DONJON Photo #1)</i>
depositing the dredged material into a containment receptacle;	DONJON deposits the dredged materials into a containment receptacle, specifically a barge. Photographs confirm that the dredged material is deposited in barges. <i>(DONJON Photo #1)</i>
removing free water from the dredged material and the containment receptacle;	Photographs document and confirm DONJON’s process wherein the dredged

	material is dewatered in the containment receptacle (barge). <i>(DONJON Photo #2)</i>
creating an additive slurry in a mixing container;	Photographs show various storage silos or receptacles adjacent to each other and to a water tank. The water tank is piped to a conveyor-like mixing container which is adjacent to each of the silos. It is apparent from the photos that additives and water enter to the mixing container where they are mixed to form an additive slurry. <i>(DONJON Photos #3, #4, #5, #6, #7)</i>
pumping the additive slurry from the mixing container to a mixing assembly disposed within the containment receptacle;	Photos show that the mixing container itself includes structure to mix the additive slurry and transport that additive slurry to the containment receptacles (barges). A mixing assembly is disposed within the barge when the additive slurry is being pumped into the barge. <i>(DONJON Photos #4, #9)</i>
mixing the additive slurry into the dredged material to form a substantially homogenous mixture; and	Photographs show that a mixing assembly is always at the DONJON site, is moved to the containment receptacle when the additive is added and mixes the additive slurry into the dredged material to form a substantially homogenous mixture. <i>(DONJON Photos #10, #11, #12, #13)</i>
curing the substantially homogenous mixture in the containment receptacle, thereby producing a structural fill material and reducing particulate emissions.	Photographs of the DONJON operation demonstrate that, after mixing the additive slurry into the dredged material and forming a substantially homogenous mixture, the homogenous mixture is then left in the containment receptacle until it is cured. The product is a structural fill, with reduced particulate emissions throughout the process of forming that fill. Based on information, the structural fill is being brought to the Meadowlands for beneficial re-use. <i>(DONJON Photo #14)</i>

Based on this analysis, DONJON's operations meet each element of claim 1 of the '731 patent. It is further noted that, based on information, DONJON utilizes the additives identified in the '731 patent. Therefore, the remaining dependent and independent claims of the '731 patent are also met.

B. The '614 Patent

The '614 patent, entitled "Processing of Waste Material," was issued on August 6, 1996 based upon an application filed February 8, 1994. Generally, the '614 patent provides for an apparatus and method for chemically and physically stabilizing contaminated soil. Dredged material is loaded and then received in a vibrating screen. From the screen, material is discharged into a homogenizer through a conveyer. After homogenization in the homogenizer, the material is dropped into a mixer where an additive is added based upon the weight of the waste material. Requirements for dredged material and stabilized dredged material mandate adherence to a formula for stabilization which is dependent upon the weight of the dredged material being treated. The additive and waste material are mixed and then dropped to a processing terminus or a truck loading lane.

Each of the elements of claim 1 of the '614 patent is literally found in OENJ's and Clean Earth Dredge Technologies, Inc.'s (CEDTI) offshore operations. That is, both OENJ's and CEDTI's facilities meet each and every element of claim 1. The treated material is loaded in a processing terminus onto trucks for disposal at property immediately adjacent to the facility itself.

Claim 1 of the '614 Patent	OENJ's Facility	CEDTI's Facility
A method for processing waste material comprising the steps of:	The purpose of the plant is to process waste material. <i>(OENJ Photos #1, #2, #3, #4, #5, #6, #7)</i>	The purpose of the plant is to process waste material. <i>(CEDTI Photo #1)</i>
receiving said waste material in a vibrating screen box;	Photographs show waste material is placed on a loading chute where it is then transferred to a vibrating screen box. The vibrating screen box is designed to vibrate with openings of a desired size. Waste material larger than the openings bounce off the screen while the remainder of the waste material passes through the vibrating screen box. The waste material then passes through to the homogenizer. <i>(OENJ Photos #2, #3, #4, #7)</i>	Photographs show waste material is placed on a loading chute where it is then transferred to a vibrating screen box. The vibrating screen box is designed to vibrate with openings of a desired size. Waste material larger than the openings bounces off the screen and falls to a different chute, while the remainder of the waste material passes through the vibrating screen box to the homogenizer. <i>(CEDTI Photos #2, #3, #4)</i>
vibrating said vibrating screen box to separate lumps of said waste material that are larger than a predetermined size thereby removing lumps of said waste material of a size greater than said	The photographs clearly depict the vibrating screen box and that waste material is separated so that larger pieces of waste material are removed from the screen and smaller sized pieces of waste material pass through	Photographs depict the vibrating screen box and that waste material is separated so that larger pieces of waste material are removed from the screen by falling down a chute while smaller size pieces of

predetermined size from said waste material;	the screen to the homogenizer. <i>(OENJ Photos #2, #3, #4, #5, #6, #7)</i>	waste material pass through the screen to the homogenizer. <i>(CEDTI Photos #2, #3, #4)</i>
discharging said waste material of a size less than said predetermined size into a homogenizer;	See above. <i>(OENJ Photos #2, #3, #4, #5, #6, #7)</i>	See above. <i>(CEDTI Photos #2, #3, #4)</i>
receiving said waste material into said homogenizer;	Photographs show that the vibrating screen box is located over a loading harbor such that waste material which passes through the screen box, is received by the homogenizer. <i>(OENJ Photos #2, #3, #4, #5, #6, #7)</i>	Photographs show that the vibrating screen box is located above the homogenizer such that waste material which passes through the screen box is received by the homogenizer. <i>(CEDTI Photos #2, #3, #4)</i>
homogenizing said waste material in said homogenizer;	Photographs show that OENJ employs a homogenizer which homogenizes the waste material. <i>(OENJ Photos #2, #3, #4, #5, #6, #7)</i>	CEDTI employs a homogenizer which, based upon CEDTI's descriptions on its web site, includes augers for homogenizing the waste material. <i>(CEDTI Photos #3, #4)</i>
dropping said waste material into a mixer after homogenizing, said mixer located below said homogenizer;	Photographs show that the mixer is located after and below the homogenizer. Therefore, after homogenizing, waste material drops into the mixer. <i>(OENJ Photos #2, #3, #4, #5, #6, #7)</i>	Photographs show that the mixer is located after and below the homogenizer. Therefore, after homogenizing, waste material drops into the mixer. <i>(CEDTI Photo #5)</i>
accumulating a batch of waste material in said mixer;	The waste material is dropped into the mixer until a batch has been loaded into the mixer. The batch size may be determined by the clam shell which loads each batch of dredged material into the facility or by weight measurement at any point in the facility. <i>(OENJ Photos #2, #3, #4, #5, #6, #7)</i>	The waste material is dropped into the mixer until a batch has been loaded into the mixer. The batch size may be determined by the clam shell which loads each batch of dredged material into the facility or by weight measurement at any point in the facility. <i>(CEDTI Photo #6)</i>
weighing said batch of waste material to determine an amount of additive to be added to said waste material;	The weight of the material must be determined for calculations of the amount of additive to add to the waste material. <i>(OENJ Photos #2, #3, #4, #5, #6, #7)</i>	The weight of the material must be determined for calculations of the amount of additive to add to the waste material. <i>(CEDTI Photo #6)</i>
mixing said waste material	Pictures show that the additive	Pictures show that the additive

with said additive in said mixer to form a mixture; and	goes into the mixer where it is mixed with the waste material to form a mixture. <i>(OENJ Photos #5, #6, #7)</i>	goes into the mixer where it is mixed with the waste material to form a mixture. <i>(CEDTI Photo #7)</i>
dropping said mixture from said mixer to a processing terminus located below said mixer.	Photographs show that the processing terminus is a truck loading lane. The mixer has doors, or a trap, which opens to allow each batch to drop to a truck. The doors shut and reopen when the next batch is ready to drop. Photographs show the truck in the terminus. <i>(OENJ Photos #6, #7)</i>	Photographs show that the processing terminus is a conveyer mechanism and receiving area located below the mixer. From this receiving area, the mixture can be collected, retrieved and or transported. The processing terminus is located below the mixture. <i>(CEDTI Photo #2)</i>

Based on this analysis, OENJ's and CEDTI's facilities meet each element of claim 1 of the '614 patent.

C. The '605 Patent

The '605 patent, entitled "Remediation of Earthen Material" was issued on August 3, 1999 and is a continuation claiming priority from an application filed August 30, 1993. The '605 patent discloses an apparatus for the in situ remediation of dredged material. The apparatus, which is typically part of a crane-like vehicle, has a generally cylindrical tined assembly, housing for mounting that assembly for rotational motion, a hydraulic driver for delivery of torque to rotate the tined assembly and an additive supply system configured to drop an additive into the space between or defined by the length of the cylindrical tined assembly.

Photographs show that this mixing assembly is what is used by DONJON to mix the additive slurry and the dredged material in the containment receptacle or barge as discussed above.

Claim 1 of the '605 Patent	DONJON's Mixing Assembly
An apparatus for processing earthen material comprising:	Photographs show the mixing assembly is part of a crane-like vehicle for processing dredged material. <i>(DONJON Photo #10)</i>
a generally cylindrical shaft capable of rotation;	Photographs show that the apparatus has a generally cylindrical shaft that rotates. <i>(DONJON Photo #12)</i>
a plurality of tines extending in a generally radial direction from and perpendicular to the shaft;	The photographs show that tines do extend radially from the shaft. The direction of the tines extension is perpendicular to that shaft. <i>(DONJON Photos #12, #13, #15)</i>

a housing for mounting said cylindrical shaft for rotational motion;	Photographs depict a housing to mount the shaft for rotational motion. <i>(DONJON Photos #13, #15)</i>
a hydraulic driver for delivering torque to rotate said cylindrical shaft comprising a rotary driver mounted with a drive shaft parallel to and spaced at a distance from the axis of the cylindrical shaft;	The photographs show the hydraulic driver. The hydraulic driver delivers torque to rotate the shaft and must be mounted with a drive shaft parallel to and spaced at a distance from the axis. <i>(DONJON Photos #10, #13)</i>
a sensor for detecting information indicative of torque on said tined assembly,	Although photographs do not show a sensor, there must be a sensor for detecting information indicative of torque on the shaft for proper operation.
a display for indicating torque to a user of said apparatus as an indication of the consistency of the earthen material during remediation;	See above.
a hydraulic line feeding said hydraulic driver; and	Hydraulic line feeds the driver. Without such hydraulic line, the driver could not operate. <i>(DONJON Photos #10, #13)</i>
an additive supply system configured to drop an additive into the space defined by and along the length of said cylindrical shaft and comprising a series of delivery heads spaced regularly along the length of the cylindrical shaft and one or more supply augers mounted independently from said cylindrical shaft.	Upon information and belief, DONJON is using the delivery system on the apparatus or an equivalent thereof. <i>(DONJON Photos #3, #4)</i>

Based on this analysis, DONJON's mixing assembly meets each element of claim 1 of the '605 patent.

Garrubbo, Capece, D'Arcangelo, Millman & Smith, P.C.

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OF COUNSEL
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JAMES J. SEAMAN

* CERTIFIED BY THE SUPREME
COURT OF NEW JERSEY AS A
CIVIL TRIAL ATTORNEY
** ALSO MEMBER OF FL BAR
*** ALSO MEMBER OF PA BAR
**** ALSO MEMBER OF NY BAR

September 26, 2005

VIA FEDEX Tracking # 853550996185

John Berry Esq.
225 Park Avenue South
14th Floor
New York, NY 10003

Dear Mr. Berry:

In preparation of our meeting on Friday September 29, 2005, I am providing you with summary material. In addition to myself and Ritchie Studer, I have asked an additional principal at UTEX Environmental Services, LLC.

The essence of the material is to set out the basis of the claims of intellectual property and patent rights by UTEX.

In summary fashion the material sets forth dredge treatment technologies employed by the NY & NJ Port Authority both individually as well as jointly with the Army Corps of Engineers. You will note from the information that significant volumes of contaminated sediments have been processed and beneficially placed upland in recent years with anticipation of considerable volumes to continue for the foreseeable future. It is also apparent that the present lowest cost and environmental sound methodologies for processing and upland placement for beneficial reuse employs technology owned by UTEX.

Our review of the dredging activities reveals that your agency has contracted and continues to contract for contaminated dredging treatment for berths and channels leading from the berths to the federal channels. I have enclosed contracts for your review, regarding joint efforts of your agency and the Army Corps of Engineers. In all cases the

contaminated dredge treatments operations are common to both federal, non-federal and joint federal and port sponsored projects.

At our meeting I believe it would be helpful to summarize for you the efforts to resolve the issues directly with the Army Corps Engineers by UTEX.

Very truly yours,

A handwritten signature in black ink, appearing to read "Frank G. Capece", written in a cursive style.

FRANK G. CAPECE

FGC:ck
Encl.

Garrubbo, Capece, D'Arcangelo, Millman & Smith, P.C.

ATTORNEYS AT LAW

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COURT OF NEW JERSEY AS A
CIVIL TRIAL ATTORNEY
* ALSO MEMBER OF FL BAR
** ALSO MEMBER OF PA BAR
*** ALSO MEMBER OF NY BAR

October 12, 2005

Mr. Herbert S. Somewitz
Chief of Contracts Law Department
Port Authority of NY & NJ
225 Park Ave., South, 14th Floor
New York, NY 10003

RE: UTEX Dredge Treatment Patents

Dear Mr. Somewitz:

In response to our meeting on September 29th, we have assembled the enclosed data for your review. Enclosed you will find:

- Five copies of Gibbons, Del Deo, Dolan, Griffinger & Vecchine's opinion and analysis of various patents owned by UTEX Holdings, LLC through its wholly owned subsidiary TDM America, LLC. Specifically, the patent analysis and resulting opinion confirms that dredging and treatment methods being employed by contractors providing services to Port Authority under their issued contracts have literally infringed on UTEX owned technology. Included with the opinion letter are copies of the referenced patents and related patents owned by TDM America LLC, a UTEX wholly owned company. The correspondence are applicable to Port issued and managed contracts.
- Five copies of Port Authority's Dredging Fact Sheet evidencing some 26 separate berth dredging contracts completed from 1999 through 2004. We believe most of these contracts are subject to the referenced patent opinion letter.
- Copies of eight Port Authority contracts that evidence specific upland disposal and treatment subject to the enclosed patent infringement opinion letter. (One complete and 4-pertainant reference copies)
- A copy of initial noticing correspondence to the Port Authority in September of 1997, which was the initial petitioning for intellectual patent pending status on what later became issued patent 6,293,731.

As you maybe aware, in April of this year we presented similar data to the Army Corp of Engineers. We currently have initiated dialogue with counsel of the ACE involving their contracts within the federal channels of the Port. It is our understanding the ACE is currently evaluating their position on this matter. What is unclear to us is if the ACE is representing the Port Authority's interest in the Federal Contract - Federal Channels. We would appreciate your confirmation pertaining to the ACE's representations on these matters.



With respect to contracts issued by the Port Authority for dredging that involved upland treatment and disposal, we have enclosed evidence of historical and current use of UTEX's technologies by Port Authority contractors. It is apparent that through the development of dredge treatment methodologies, UTEX's patented techniques and methods have been found to be the most environmentally sound and of the lowest cost alternative for upland disposal of contaminated sediments. It is our desire to continue to make our treatment methods available to the Port Authority through a joint dispute resolution process which could include an agreed stand down period with reservation of all rights. We will make ourselves available to you and your staff as you research these matters. We are prepared to employ and maintain an open dialogue as we search for a resolution that is historically fair for UTEX and beneficially helpful as the Port Authority moves forward.

It is our desire to establish a time frame for furthering these discussions and as such we would appreciate understanding what would be the appropriate steps for continuing the dialog.

Sincerely,

Frank G. Capece Esq.

Cc: Ritchie G. Studer
Rick R. Redle



ORRIN G. HATCH
UTAH

PATRICIA KNIGHT
CHIEF OF STAFF

704 Hart Senate Office Building

TELEPHONE: (202) 224-5251
TDD (202) 224-2849
FAX: (202) 224-6331

Website: <http://www.senate.gov/hatch>

United States Senate

WASHINGTON, DC 20510-4402

May 24, 2005

COMMITTEES:

FINANCE

JUDICIARY

HEALTH, EDUCATION,
LABOR, AND PENSIONS

INTELLIGENCE

JOINT COMMITTEE
ON TAXATION

Lieutenant General Carl A. Strock
Commander and Chief of Engineers
United States Army Corps of Engineers
441 G Street, NW
Washington, DC 20314

Colonel Richard J. Polo, Jr.
Commander and District Engineer
United States Army Corps of Engineers
New York District
26 Federal Plaza
New York, NY 10278-0090

Dear Lieutenant General Strock and Colonel Polo:

I am writing with regard to the Army Corps of Engineers dredge and sediment management contracts. It appears that the practices of some Army Corps of Engineers contractors may be unfairly damaging a Utah company.

As you may be aware, UTEX Environmental Services is a Utah-based environmental and waste management company. UTEX has broad experience with multiple proprietary treatment procedures, many of which have been and continue to be utilized for the treatment and management of contaminated dredge sediments. It has come to my attention that some Army Corps of Engineers dredge treatment contractors may be utilizing patented techniques exclusively owned by UTEX.

I recognize the importance of maintaining the competitive balance within the very limited number of contractors capable of providing necessary dredge and sediment removal services. I also understand the importance of proper protection of patented technologies. In an effort to resolve this matter, UTEX's principals are interested in meeting with you to further discuss their concerns. UTEX has provided the enclosed materials to assist you and your staff in fully understanding the company's position.

It is my understanding that several new contracts will be awarded by the Army Corps of Engineers in the coming months that will contain large amounts of contaminated dredge sediments that are planned to be treated and disposed of upland. I also am

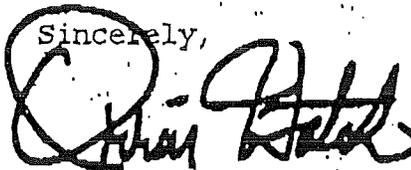
May 24, 2005

Page 2

aware that several contracts are currently underway or will soon commence which have significant amounts of dredge sediments to be treated and disposed of upland. As the contractors managing these projects may be unfairly applying UTEX's patented technologies, I hope you will be able to meet with members of UTEX to discuss this matter with them.

Thank you for your attention to this matter. To set up a meeting with UTEX, please contact Scott Crawford, UTEX's Director of Engineering, at 801-732-2000. Also, for further information, please feel welcome to contact J.J. Brown of my staff at (202) 224-5251.

Sincerely,



Orrin G. Hatch
United States Senator

OGH:jajj
Enclosure

CC:

Mr. Kenneth J. Ringler, Jr.
Executive Director
The Port Authority of New York and New Jersey
225 Park Avenue South
New York, NY 10003



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

Office of Counsel

July 25, 2005

David W. Denenberg
Gibbons, Del Deo, Dolan, Griffinger & Vecchione
Attorneys at Law
One Pennsylvania Plaza, 37th floor
New York, NY 10119-3701

Re: Utex Holding's Alleged Infringement

Dear Mr. Denenberg:

In your letters to Senator Hatch and staff on April 4, 2005, and to the Corps of Engineers ("Corps") dated June 16 and 29, 2005, you made allegations of patent infringement and improper disclosure of confidential information by the Corps, and asked for a meeting to discuss economic resolution of past, present, and future uses of technology purportedly owned by your client, UTEX Holdings, LLC.

You claimed that various patents, analyzed in an enclosure to your April 4 letter, were infringed by dredging activities conducted by Corps of Engineers contractors, and that your enclosed analysis conformed to federal court rules for analysis prior to filing a patent infringement suit. The Corps viewed this as express intent to take legal action against the Corps for infringement.

In response to these serious allegations, the Corps immediately asked you if the analysis sent to Sen. Hatch, the Corps, and others, could be provided to Corps dredging contractors to aid in quickly limiting any potential infringement. (June 9, 2005 letter to you from New York District.) You denied permission in your June 16 letter, expressing intent to negotiate a resolution only with the Corps, which somehow would also apply to port authorities and contractors.

For the dredging operations in question, the Corps only sets performance standards and does not restrict contractors in their choice of cost effective and efficient equipment and methods; therefore, we do not license or endorse commercial technologies. The Corps does, however, require its contractors to license patented inventions if contractors choose to use those inventions, and to include licensing costs in their estimates. As a result, the Corps must rely on its contractors to evaluate how their dredging activities relate to UTEX's patents. Therefore, the Corps notified its contractors of the numbers of the patents in question and suggested the desirability of obtaining a license if they were using any patented technology. We provided no information other than publicly available patent numbers. Contractors, independent of the Corps, identified and contacted UTEX as the source of the inquiry.

As part of our inquiry into this matter, we reviewed the U.S. Patent and Trademark Office assignment database. None of the patents in question is recorded in the assignment database as being owned by UTEX, although you claim in your June 29 letter that UTEX owns or controls the patents. Prior to continuing with any discussions, the Corps must have documented proof of UTEX's ownership, as we stated in our June 20, 2005, letter.

Also in your June 29 letter, you requested an immediate meeting with the Corps to discuss an economic resolution, while rejecting consideration of licenses with contractors. The Corps does not believe that an immediate meeting would be productive. The Corps' patent department must collect and evaluate information related to your allegations so that we have sufficient background to meaningfully participate in any such meeting. And, before any such meeting, the Corps may consult with the Department of Justice, as that Department will represent the Corps in any litigation. Again, the Corps does not license and endorse commercial dredging equipment and processes, but the Corps may wish to meet to discuss a mutually acceptable path forward after we have had an opportunity to evaluate your allegations.

Please be assured that we are moving quickly to resolve this serious matter, and will contact you as soon as we evaluate our contractors' practices in light of your analysis. If you have immediate questions or concerns, please contact our New York District attorney, Rita Fang, at 917-790-8062.

Sincerely yours,



Lorraine Lee
District Counsel



THE PORT AUTHORITY OF NY & NJ

R.M. Larrabee
Director, Port Commerce Department

December 7, 2009

Mr. Rich G. Studer
UTEX Holdings, LLC
4570 Westgrove Drive, Suite 240
Addison, Texas 75001

RE: Permitting

Dear Mr. Studer:

We understand that certain permitting activities that your firm is undertaking, related to acceptance and placement of processed dredged material [PDM], require the identification of "source" materials which, consistent with our Agreement dated July 17, 2009, would be dredged material not suitable for ocean placement. The purpose of this letter is to confirm the Port Authority's agreement with UTEX [et al] pursuant to which all such PDM that is dredged from the Port Authority's marine facilities in the Port District, and is unsuitable for ocean disposal, will be shipped to a barge-accessible UTEX beneficial placement facility in the Port District. Additionally, the source materials may include material unsuitable for ocean disposal that is dredged from Federal navigation channels within the Port District if the Port Authority is a local sponsor with the Federal Government of the channel dredging program. It is our intention that these materials will undergo specific pre-placement processing, consistent with past permit requirements for the upland placement of the PDM for beneficial use purposes, prior to their delivery to your facility.

We expect that this description of "source" material will be satisfactory to the permitting agency, however should further clarifications be necessary, please feel free to contact Matt Masters of my staff at 212-435-4273.

Sincerely,

R.M. Larrabee
Director
Port Commerce Department

225 Park Avenue South - 11th Floor
New York, NY 10003
T: 212-435-4218 F: 212-435-4201
rlarrabee@panynj.gov



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

Office of Counsel

July 25, 2005

David W. Denenberg
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Attorneys at Law
One Pennsylvania Plaza, 37th floor
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Lorraine Lee
District Counsel

ORRIN G. HATCH
UTAH

PATRICIA KNIGHT
CHIEF OF STAFF

104 Hart Senate Office Building

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Website: <http://www.senate.gov/~hatch>

United States Senate

WASHINGTON, DC 20510-4402

May 24, 2005

COMMITTEES:

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JUDICIARY

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JOINT COMMITTEE
ON TAXATION

Lieutenant General Carl A. Strock
Commander and Chief of Engineers
United States Army Corps of Engineers
441 G Street, NW
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Colonel Richard J. Polo, Jr.
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United States Army Corps of Engineers
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May 24, 2005
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Sincerely,


Orrin G. Hatch
United States Senator

OGH:jajj
Enclosure

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Mr. Kenneth J. Ringler, Jr.
Executive Director
The Port Authority of New York and New Jersey
225 Park Avenue South
New York, NY 10003