



WASTE MANAGEMENT
& RADIATION CONTROL

Utah Division of Waste Management And Radiation Control
UTAH USED OIL TRANSFER FACILITY PERMIT



Permittee Name: Clean Harbors Aragonite, LLC

Permittee Mailing Address: PO Box 1339
Grantsville, UT 84029

Permittee Phone Number: (435) 884-8122

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Permittee Facility Address: 11600 North Aptus Road
Aragonite, UT 84022

Facility Operations Contact Information: William Simmons, Facility General Manager III
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Type of Permit: Used Oil Transfer Facility Permit

Permit #: UOP-0213

EPA ID Number: UTD981552177

Date of Issuance: Pending

Signature: _____ Date: _____
Douglas J. Hansen, Director
Division of Waste Management and Radiation Control

I.A. Effect of Permit

- I.A.1. Clean Harbors Aragonite, LLC (hereafter referred to as “the Permittee”) is hereby authorized to operate a Used Oil Transfer Facility located 11600 North Aptus Road in Aragonite, Utah 84022, in accordance with all applicable requirements of R315-15 of the Utah Administrative Code (UAC) and the Used Oil Management Act (the Act) 19-6-701 et. seq., Utah Code and this Permit.
- I.A.2. This Permit shall be effective for a term not to exceed ten years in accordance with the requirements of R315-15-15 of the Utah Administrative Code. This Permit shall be reviewed by the Director five years after the Permit’s effective date of issuance or when the Director determines that the Permit requires review.
- I.A.3. Attachments incorporated by reference are enforceable conditions of this Permit, as are documents incorporated by reference into the attachments. Language in this Permit supersedes any conflicting language in the attachments or documents incorporated into the attachments.

I.B. Permit Revocation

- I.B.1. Violation of any permit condition or failure to comply with any provision of the applicable statutes and rules shall be grounds for enforcement actions, including revocation of this Permit. The Director shall notify the Permittee in writing of his intent to revoke this Permit.

I.C. Permit Modification

- I.C.1. The Permittee may request modifications to any item or activity covered by this Permit by submitting a written permit modification request to the Director. If the Director determines the modification request is substantive, a public hearing, a 15-day public comment period, or both may be required before a decision by the Director on the modification request. Implementing a substantive modification prior to the Director’s written approval constitutes a violation of the Permit and may be grounds for enforcement action or permit revocation.
- I.C.2. The Director may modify this Permit as necessary to protect human health and the environment, because of statutory or regulatory changes or because of operational changes affecting this Permit.
- I.C.4. The Permittee shall notify the Director, in writing, of any non-substantive changes, such as changes in the contact person, within 20 days of the change.

I.D. Spill Prevention, Emergency Controls, and Maintenance

- I.D.1. The Permittee shall maintain and operate the transfer facility, including all used oil transportation vehicles, storage units, containers, tanks and associated equipment to minimize the possibility of fire, explosion or sudden or non-sudden release of used oil to air, ground, soil, surface and groundwater and sewer systems.

- I.D.2. To ensure compliance with this section, the Permittee shall inspect and maintain used oil equipment, tanks, containers, storage units and transportation vessels according to the Inspection Matrix in Attachment 3 of the Permittee's State-issued RCRA Part B Permit and section 5.0 of Attachment 5 of this permit.
- I.D.3. Secondary containment is required for containers and tanks, including any piping connections and valves, in accordance with R315-15-4.6(d) of the Utah Administrative Code.
- I.D.4. In the event of a release of used oil, the Permittee shall comply with the Emergency Controls and reporting requirements specified in R315-15-9 Utah Administrative Code and the Permittee's Emergency Spill Plan in Attachment 5.
- I.D.5. It shall not constitute a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the Permittee business activity in order to maintain compliance with the conditions of this permit and attachments.
- I.D.6. The Permittee is subject to all applicable Spill Prevention, Control and Countermeasures as defined in 40 CFR 112.

I.E. Record Retention

- I.E.1. The Permittee shall maintain all applicable used oil records required by R315-15 of the Utah Administrative Code and this Permit at the Permittee's used oil transfer facility or at the Clean Harbors Aragonite, LLC facility located at 11600 North Aptus Road in Aragonite, Utah 84022.
- I.E.2. All records shall be readily accessible for inspection by representatives of the Director. Records may be in a hard copy or electronic format. Records shall be maintained for a minimum of three years.

I.F. Tracking

- I.F.1. The Permittee shall keep documentation of each used oil load received, transferred, and delivered to verify storage periods.
- I.F.2. The Permittee's facility acceptance records shall document the permitted transporter's name, address, EPA identification number, the name of the receiving entities, date of acceptance and signatures of both the transporter and an authorized representative of the Permittee.
- I.F.3. The Permittee's facility shipping records shall document the transfer of the used oil to a permitted used oil transporter, transfer facility, burner or processor. This record shall have the company name, address and EPA identification number of the entity receiving the used oil. Both the Permittee and the receiving entity (dated upon receipt) shall sign the shipping record.

I.G. Sampling and Analyses

I.G.1. The Permittee shall follow all sampling and analytical procedures in Condition II.D and Attachment 4 when conducting used oil sampling and analytical testing to meet the requirements of R315-15 of the Utah Administrative Code and this Permit.

I.H. Prohibited Waste

I.H.1. Used oil that has been mixed with hazardous waste as defined by R315-261 of the Utah Administrative Code or PCBs as defined by R315-301-2(53) of the Utah Administrative Code shall no longer be managed as used oil and shall be subject to applicable hazardous waste and PCB-contaminated waste rules.

I.H.2. Used oil shall not be stored in tanks, containers, or storage units that previously stored hazardous waste unless these tanks, containers, storage units and associated piping are cleaned in accordance with R315-261-7 of the Utah Administrative Code.

I.H.3. The Permittee shall not place, manage, discard, or otherwise dispose of used oil in any manner specified in R315-15-1.3 of the Utah Administrative Code.

I.I. Waste Characterization and Disposal

I.I.1. The Permittee shall properly characterize used oil waste related material to determine if the wastes are hazardous or non-hazardous in accordance with R315-15-8 of the Utah Administrative Code and manage it accordingly.

I.I.2. The Permittee shall maintain records showing characterization, handling and disposal of waste generated at the facility.

I.J. Used Oil Storage

I.J.1. The Permittee shall not store used oil longer than 35 days without first obtaining a processor permit for that storage location. This includes storing used oil in vehicles at loading and unloading docks and parking areas.

I.J.2. The Permittee shall have secondary containment for all storage units, containers, tanks, transportation vehicles and associated piping in accordance with R315-15-4.6 of the Utah Administrative Code. Secondary containment is defined for each storage area in Attachment 2, Used Oil Containment Areas.

I.J.3. The Permittee shall not store used oil in units other than tanks, containers, or units subject to regulations under R315-265 or R315-264 of the Utah Administrative Code.

I.J.4. Frac tanks use for used oil storage for more than 90 days shall be regulated as used oil storage tanks under this permit. Used oil stored in Frac tanks shall follow Permit Condition I.J.1 of this permit.

I.J.5. The Permittee shall label all used oil containers, tanks and, when applicable, associated piping with the words “Used Oil.”

I.K. Liability and Financial Requirements

I.K.1. The Permittee shall be financially responsible for cleanup and closure costs, general liabilities and environmental pollution legal liability for bodily or property damage to third parties resulting from the release of used oil in accordance with R315-15-10 through 12 of the Utah Administrative Code and this Permit.

I.K.2. The Permittee shall provide documentation of financial responsibility for cleanup and closure, environmental pollution legal liability and general liability coverage annually to the Director for review and approval by March 1 of each reporting year or upon request by the Director.

I.K.3. The Permittee shall receive written approval from the Director for any changes in the extent, type (e.g., mechanism, insurance carrier, or financial institution) or amount of the environmental pollution legal liability or financial assurance mechanism for coverage of physical or operational conditions at the facility that change the nature and extent of cleanup and closure costs. The Permittee shall receive approval from the Director prior to implementation of these changes.

I.L. Cleanup and Closure Plan

I.L.1. The Permittee shall update its closure plan cost estimates and provide the update estimated to the Director, in writing, within 60 days following a facility modification that causes an increase in the financial responsibility required under R315-15-10 of the Utah Administrative Code. Within 30 days of the Director’s written approval of a permit modification for the cleanup and closure plan that would result in an increase cost estimate, the owner or operator shall provide to the Director the information specified in R315-15-11.2(b)(2) of the Utah Administrative Code and Condition II.G of this Permit.

I.L.2. The Permittee shall initiate closure of the facility within 90 days after the Permittee receives the final volume of used oil or after the Director revokes the Permittee’s Transfer Facility Permit in accordance with the requirements of R315-15-11.3 of the Utah Administrative Code and this Permit.

I.L.3. Within 60 days of completion of cleanup and closure, the Permittee shall submit to the Director, by registered mail, a certification that the facility has been closed in accordance with R315-15-11.4 of the Utah Administrative Code and the specifications of the approved cleanup and closure plan. An independent, Utah-registered professional engineer and the Permittee shall sign the closure certification.

I.L.4. Additional sampling and remediation may be required by the Director to verify that cleanup and closure has been completed according to R315-15 of the Utah Administrative Code.

I.M. Used Oil Handler Certificate

I.M.1. In accordance with R315-15-4 of the Utah Administrative Code, the Permittee shall not operate as a used oil transfer facility without obtaining annually a Used Oil Handler Certificate from the Director. The Permittee shall pay a used oil handler fee, pursuant to Utah Code 63J-1-504, by December 31 of each calendar year to receive certification for the upcoming calendar year.

I.N. Inspection and Inspection Access

I.N.1. Any duly authorized employee of the Director may, at any reasonable time and upon presentation of credentials, have access to and the right to copy any records relating to used oil and to inspect, audit or sample. The employee may also make record of the inspection by photographic, electronic, audio, video, or any other reasonable means to determine compliance.

I.N.2. The authorized employees may collect soil, groundwater, or surface water samples to evaluate the Permittee's compliance.

I.N.3. Failure to allow reasonable access to the property by an authorized employee may constitute "denial of access" and may be grounds for enforcement action or permit revocation.

I.O. Annual Report

I.O.1. As required by R315-15-13.4 of the Utah Administrative Code, the Permittee shall prepare and submit an Annual Report to the Director by March 1 of the following year. The Annual Report shall describe the Permittee's used oil activities in Utah and document financial assurance using the Division's Transfer Facility Annual Report form.

I.P. Other Laws

I.P.1. Nothing in this Permit shall be construed to relieve the Permittee of his obligation to comply with any Federal, State or local law.

I.Q. Enforceability

I.Q.1. Violations documented through the enforcement process pursuant to Utah Code Annotated 19-6-112 may result in penalties in accordance with R315-102 of the Utah Administrative Code.

I.R. Effective Date

I.R.1. The permit is effective on the date of signature by the Director.

II.A. Used Oil Transfer Facility Operations

- II.A.1. The Permittee is authorized to store 904,750 gallons of used oil in tanks, containers, or units subject to regulations under R315-265 or R315-264 of the Utah Administrative Code, stored inside one of the processing and storage buildings, breezeway, and docks for up to 35 days.
- II.A.2. The Permittee shall only accept shipments of used oil from Utah-permitted used oil transporters that is below 1,000 ppm for halogens.
- II.A.4. For shipments of bulk used oil, the Permittee shall, within 24 hours of arrival, determine the halogen content of the oil through testing or verification that the transporter delivering the used oil has recorded the halogen content of the used oil on the shipping documents.
- II.A.5. For shipments of non-bulk used oil, i.e. containers, drums, and totes, the Permittee shall, within 24 hours of arrival, determine the halogen content of the oil through testing or verification that the transporter delivering the used oil has recorded the halogen content of the used oil on the shipping documents.
- II.A.5.a. In the unforeseeable case in which the transporter delivering the used oil has not determined or recorded the halogen content of the used oil on the shipping records, the Permittee shall, as soon as possible and within 10 days of arrival, determine the halogen content of the used oil before moving the used oil from the receiving areas of Buildings E-1, E-5 and E-8 or associated docks, into any of the designated storage areas or offered up for transport. The halogen determination time, including the 10-day allowance, shall not exceed the 35-day storage limit of the transfer facility.
- II.A.5.b. The Permittee shall determine the halogen content by collecting a representative sample in accordance with Condition II.D and Attachment 4, then screening the used oil sample for halogens or by submitting the sample to a Utah-certified laboratory for analysis in accordance with the analytical requirements of Attachment 4.
- II.A.5.c. The Permittee shall then record the results of the halogen testing in the Waste Information Network (WIN), including the date of the test, and the name of the tester (or initials) prior to shipment from facility.
- II.A.6. The Permittee is not required to further test used oil from a Utah-registered used oil marketer if the marketer provides, at the time of acceptance, analytical data results documenting that the used oil has been tested for the parameters in R315-15-1.2 of the Utah Administrative Code.
- II.A.7. The Permittee may accept shipments of used oil in containers, drums, tote tanks, closed-top frac tanks, tanker trucks from used oil transfer facilities, processors/re-refiners and burners with valid EPA identification numbers.
- II.A.8. Used oil recovered from oily water shall be managed as used oil in accordance with R315-15 of the Utah Administrative Code and this Permit.

II.A.9. The Permittee shall not accept, or store used oil with PCB concentrations greater than or equal to 50 mg/kg (ppm) unless the Permittee complies with TSCA regulations 40 CFR 761. Used oil containing PCB concentrations greater than or equal to 2 mg/kg but less than 50 mg/kg are subject to both R315-15 of the Utah Administrative Code and 40 CFR 761.

II.B. Used Oil Storage Areas and Secondary Containment

II.B.1 The Permittee shall only store used oil in manners and areas as described in Attachment 2 of this permit.

II.C. Used Oil Loading and Unloading Requirements

II.C.1. The Permittee shall secure the vehicle by positioning wheel chocks and the emergency brakes before loading or unloading used oil from transportation vehicles.

II.C.2. The Permittee shall inspect all used oil collection equipment (e.g., vehicles, tanks, and associated pumping equipment) for any damage prior to use.

II.C.3. The Permittee shall place buckets or other containers under piping connections to collect drips of used oil during loading and unloading operations.

II.C.4. The Permittee shall ensure the amount of used oil to be loaded will not exceed the current capacity. The Permittee shall utilize a calibrated gauging instrument.

II.C.5. The Permittee is authorized to transfer used oil between highway vehicles and rail cars or railcars to railcars at a permitted transfer facility in accordance with the rail car loading procedure in Attachment 1.

II.C.6. During loading and unloading operations, a trained operator shall remain at the transfer location and maintain control of the operations throughout the entire used oil transfer.

II.D. Used Oil Sampling and Analysis

II.D.1. The Permittee shall sample and analyze used oil accepted at the facility when required by Condition II.A of this Permit in accordance with the requirements of Attachment 4 (Sampling and Analysis Plan).

II.E. Used Oil Training

II.E.1. The Permittee shall train handlers of used oil in accordance with R315-15-4 of the Utah Administrative Code and the requirements of this Permit. New employees may not manage used oil without a trained employee present until used oil training is completed.

II.E.2. Employee training shall include documentation that the following topics were covered: identification of used oil, recordkeeping requirements and facility used oil procedures for

handling, transporting, sampling and analysis, emergency response, spill reporting and personal safety.

- II.E.3. The Permittee shall provide, at a minimum, an annual used oil-training refresher course for employees handling used oil. Additional training is required if the Permittee changes used oil handling procedures.
- II.E.4. The Permittee shall keep training records for each employee for a minimum of three years. This training will be documented in Clean Harbors Electronic Training System or via a training attendance sheet in which case shall be signed and dated by each attendee to record class attendance.
- II.E.5. Employees collecting and performing field halogen testing shall be trained and shall demonstrate competence in collecting a representative used oil sample and testing for halogens using a CLOR-D-TECT® or a HYDROCLOR-Q® test kit prior to fieldwork.

II.F. Spill Response, Remediation, and Reporting

- II.F.1. In accordance with R315-15-9.1(a) of the Utah Administrative Code, the person responsible for a spill shall immediately take appropriate action to minimize the threat to human health and the environment. The Permittee shall notify the DEQ Hotline at (801) 536-4123 if the spill is greater than 25 gallons or for smaller spills that pose threat to human health or the environment.
- II.F.2. Responders shall take action to prevent a spill from spreading by utilizing absorbent, booms, pads, rags, and so on.
- II.F.3. Once the material is containerized, a waste determination shall be made to determine the material's disposition.
- II.F.4. The Permittee is responsible for the material release and shall recover oil and remediate any residue from the impacted soils, water, or other property or take any other actions as required by the Director until there is no longer a hazard to human health or the environment.
- II.F.5. All costs associated with the cleanup shall be at the expense of the Permittee.
- II.F.6. The Permittee shall maintain spill cleanup kits according to D-034-M-005 (see Attachment 3).
- II.F.7. Facility spill kits shall contain, at a minimum, the equipment listed in Attachment 5 of this permit and shall be inspected quarterly following the schedule as per State-issued RCRA Part B Permit.
- II.F.8. The Permittee shall report all relevant information, including the amount of waste generated from cleanup efforts, the characterization of the waste (i.e., hazardous or non-hazardous),

final waste determination and disposal records. The report shall also include actions taken by the Permittee to prevent future spills.

- II.F.9. An air, rail, highway or water transporter who has discharged used oil shall give notice, if required by 49 CFR 171.15, to the National Response Center at <http://nrc.uscg.mil/nrchp.html>, (800) 424-8802 or (202) 426-2675. In addition to the notification above, a written report, as required in 49 CFR 171.16, shall be presented to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau located in Washington, D.C., 20590.
- II.F.10. In accordance with R315-15-9.4 of the Utah Administrative Code, the Permittee shall submit to the Director a written report within 15 days of any reportable release of used oil.

II.G. Facility Closure

- II.G.1. The Permittee shall implement the closure plan in Attachment 7, which evaluates the potential impacts of used oil operations on the surrounding soil, groundwater and surface water in accordance with R315-15-11 of the Utah Administrative Code. The Permittee shall be responsible for any cleanup of any used oil contamination that has migrated beyond the facility property boundaries in accordance with R315-15-11(d) of the Utah Administrative Code.

Draft for Public Comment

Attachment 1 General Used Oil Operations

Description of Used Oil Processes

1.0 Introduction

The Clean Harbors Aragonite, LLC, “Aragonite” facility will be used as a transfer facility for on-specification used oil and off-specification used oil. Used oil may be transported to the facility coming from used oil generators, transporters, transfer facilities, used oil fuel marketers located within or outside the state of Utah. The primary purposes of the transfer facility will be to consolidate shipments of used oil, provide a location at which shipments of used oil can be transferred to transporter vehicles for shipments to used oil burners, and otherwise facilitate the movement of used oil between the generators or used oil facilities and those facilities that can utilize the used oil for energy recovery. The used oil may be shipped to incinerators, cement kilns, industrial boilers or other burners for energy recovery in accordance with R315-15-6 of the Utah Administrative Code. Oil may be shipped to hazardous waste incinerators for disposal if it is manifested as a characterized waste rather than used oil or meets the requirements of R315-15-6.2(a)(3) UAC.

2.0 Used Oil Shipping Documents

On-specification and off-specification used oil can be received at the Aragonite facility in containers, drums, tote tanks, closed-top frac tanks, and tanker trucks. Small containers of used oil may be transported from the Aragonite facility to the final destination facility via covered van trucks or may be transferred from small containers into tanker trucks. Tanker truck shipments of used oil received on third party Utah-permitted transporter vehicles may be transferred to closed-top frac tanks for storage or to Clean Harbor’s tanker trucks for shipment to the final destination facility.

The primary purposes of the transfer facility will be to consolidate shipments of used oil, provide a location at which shipments of used oil can be transferred to transporter vehicles for shipments to used oil burners, and otherwise facilitate the movement of used oil between the generators and those facilities that can utilize the oil for energy recovery. Shipments of used oil may be stored for up to 35 days at the Aragonite facility before being sent on to the final destination facility.

3.0 Used Oil Operations

The Aragonite facility will be used for the storage of on-specification and off-specification used oil for a period not exceeding 35 days in tanks, containers or units subject to regulations under R315-265 or R315-264 of the Utah Administrative Code. The Aragonite facility may consolidate shipments of on-specification or off-specification used oil from container to container, containers to tanker trucks, and from tanker trucks to tanker trucks, as needed. Consolidation of on-specification used oil with off-specification or untested used oil is prohibited. Consolidation of used oil can only be performed with the same type of used oil, e.g., off-specification with off-specification used oil. The facility will not conduct used oil processing, re-refining, or burning.

Used oil storage and transfer will be conducted in the areas of the facility identified in Attachment 2 of this permit.

4.0 Shipments of Used Oil

Shipments may be made to other Clean Harbors facilities or to third party used oil burners. Small containers of used oil (55-gallon drums or tote tanks) may be transported from the Aragonite facility to the final destination facility by a Utah permitted transporter via van trucks or any approved used oil transportation vehicle.

Draft for Public Comment

Attachment 2 Used Oil Containment Areas

1.0 Introduction

This attachment describes the areas of the Clean Harbors Aragonite, LLC (Aragonite) facility in which used oil can be stored.

2.0 Used Oil Containment Areas

Please refer to the facility maps provided in Attachment 3 of this permit. Table 1 at the end of this attachment identifies the areas that will be used to store and transfer containers of on-specification and off-specification used oil. The table describes the maximum storage capacity of the areas and the types of containers that will be held within the areas. Containers of used oil will be held in these areas for no more than a total of 35 days.

In general, transporter vehicles will be off-loaded within 10 days of being pulled inside the facility fence line. Used oil may be received at the facility and be stored in process until all required testing is completed and the used oil is then accepted.

3.0 Secondary Containment

The secondary containment system of the processing buildings and docks has been designed to facilitate sound container management practices and prevent the release of used oil into the environment. Drawings in Attachment 3 provide plan and section views of the containment system design.

4.0 Removal of Liquids from Containment Systems

The floor is sloped (1% to greater than 1.5%) in all container storage areas and access aisles. This slope will facilitate the detection of leaks, causing any used oil which might leak from a container to migrate down the slope to the perimeter areas. Liquid, which accumulates in the secondary containment system will be collected (e.g., vacuum truck, portable pump, etc.), characterized, and managed appropriately.

When an inspection reveals liquid within the sump, the source of the leak will be identified. The identification of the location of a leak may be accomplished in a number of ways, using a variety of inspection techniques. Visual inspection of the condition of containers, localized staining or leakage adjacent to a particular drum, rocking of containers to determine if volume has been lost are techniques which are most likely to be employed to trace the source of a leak. If these measures fail, a sample of the liquid in the sump will be analyzed for a range of characteristics based upon the possible contents of the containers in the containment area. This process should identify the used oil stream that has leaked. All the containers of that used oil stream would then be checked for leaks.

Used Oil from the leaking container will be transferred into a clean container, or the container and its contents will be transferred into an overpack. Liquid in the sump will be transferred from the sump to a clean container via a portable pump. Other suitable methods using absorbents, vacuum systems, etc. may also be used to manage spills. Any container into which used oils are transferred will be

appropriately labeled as to the type of material stored in it and managed in the same manner as was specified for the container from which the used oil originated. In the unlikely event that the material cannot be traced back to a specific container or group of containers, a sample will be analyzed to permit proper definition of the management protocol necessary for the used oil. Minor leakage which does not flow to a sump will be absorbed, collected and placed in an appropriately labeled container.

Attachment 2: Table 1 – Used Oil Containment Areas

Type of Used Oil Storage Areas	Capacity (Gallons)
E-1	57,640
E-2	84,480
E-3	161,150
E-4	90,860
E-5	63,800
E-6	115,280
E-7	153,560
E-8	126,720
Breezeway	9,680
E-1 Dock	9,240
E-5 Dock	9,240
E-8 Dock	23,100
Total Used Oil Storage Capacity	904,750

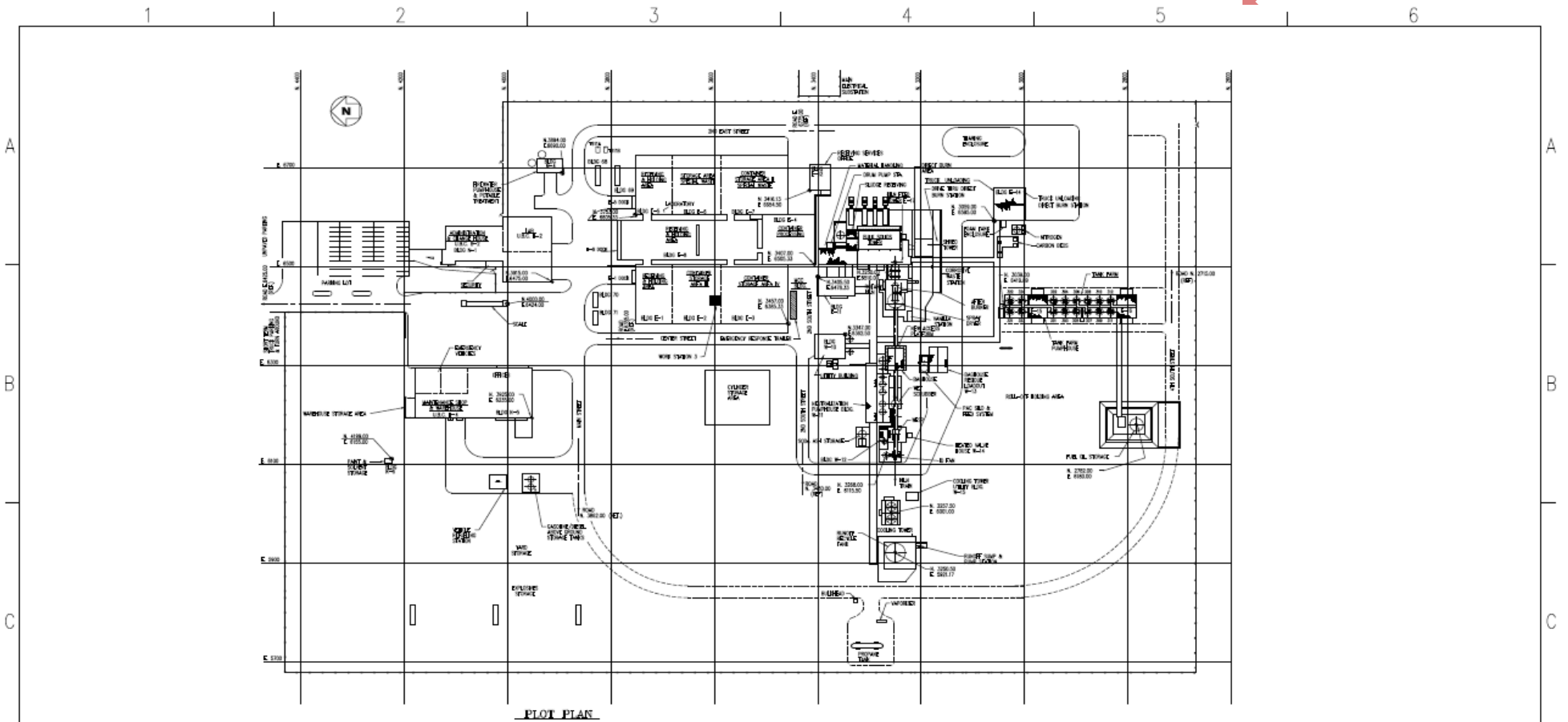
Notes:

Various types of containers will be stored in these areas. The values indicated are the maximum number of 55-gallon drums that could be stored in the Area based on the maximum volume that the particular Area could store.

Attachment 3
Facility Drawings

Next Page

Draft for Public Comment



PLAT PLAN

SCALE
 1" = 40'-0"

NOTES:		REVISIONS					REVISIONS					APPROVALS		
NO	DESCRIPTION	DATE	BY	CHK	CHK	NO	DESCRIPTION	DATE	BY	CHK	CHK	BY	DATE	
1	AS-BUILT (WAREHOUSE EXPANSION)	11-10-22	KB	TH	KB	1	ADDED SHED TOWER AREA	01-04-21	KB	TH	MM	KB		
2	ADDED NEW WATER TANK	12-9-17	GBS			2	ADDED EXPLOSIVES MAGAZINES	04-06-21	KB	TH	MM	KB		
3	MOVE EXIST. STA. ADD CONEX. MV. 68 & 69	10-05-20	KB	TH	MM	3	AS-BUILT	12-10-21	KB	TH	MM	KB		
4	ADD E-8 BLDG. ADD 70 & 71 BLDG.					4	EXTEND SOUTH FENCELINE 250'. ADD ROAD PATH	01-25-22	KB	TH	MS	KB		
5	MOVE BLDG 68, 69, ADD BLDG 70, 71	03-03-21	KB	MM	TR	5	EXTEND ROAD FOR EXPANDED FENCE LINE	05-19-22	KB	TH	JSC	KB		

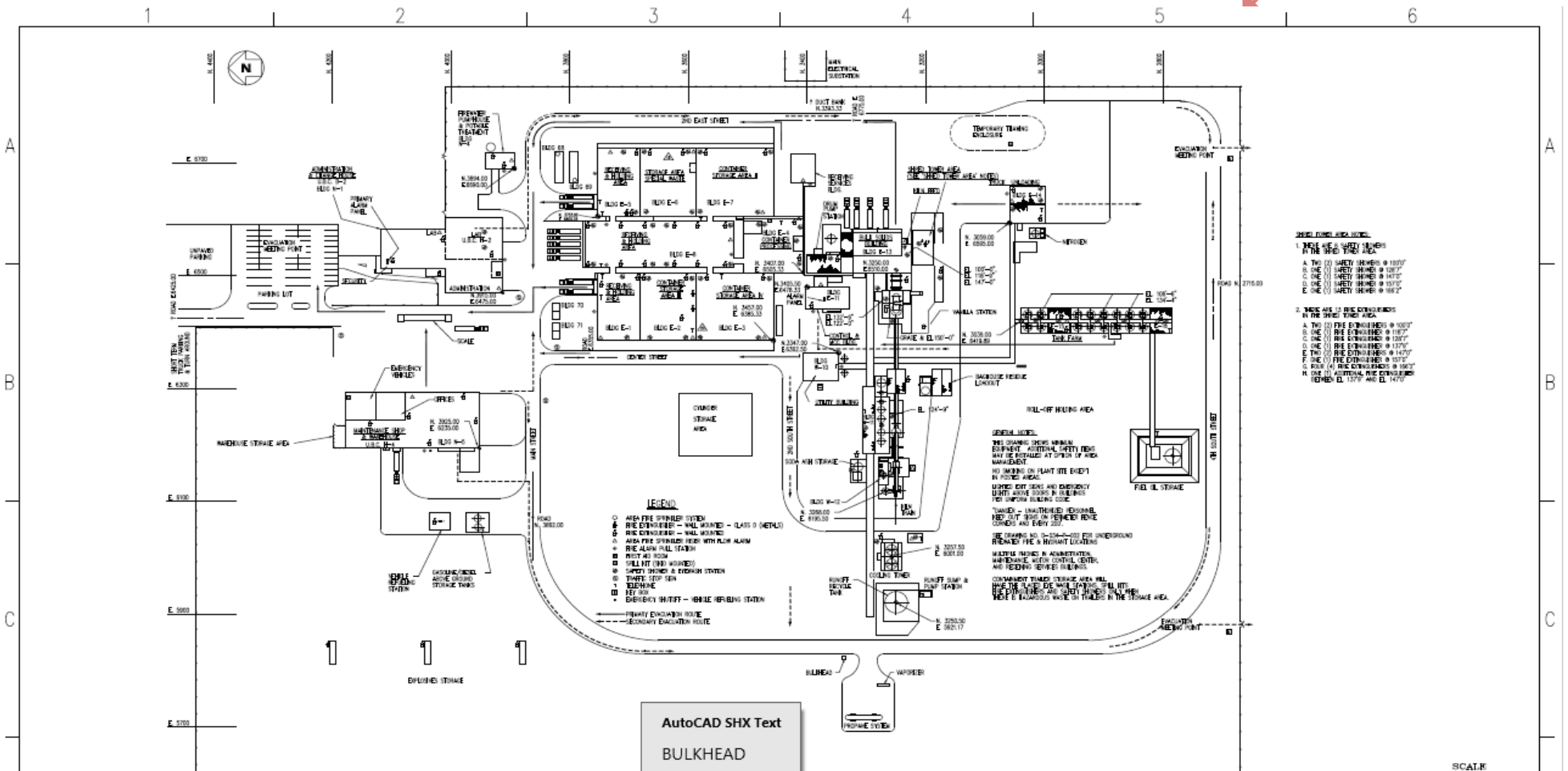
CleanHarbors
 ARAGONITE LLC
 1000 W. 1200 N. SUITE 100
 TONOPAH, NEVADA 89489

UTAH ENVIRONMENTAL SERVICE CENTER
 INCINERATION PLANT FOR INDUSTRIAL WASTES
 PLOT PLAN

FOR: TOOLE SITE
 SCALE: AS NOTED
 JOB NO:
 DATE:

CAD NO: MH4054E
 APPROV'D NO: D-034-M-002
 REV: 34

REVIEWED PROVISIONAL ENGINEER DATE:



- SHEET GENERAL AREA NOTES**
1. FIRE ALARM & SAFETY EQUIPMENT IN THE SHED FIRE AREA:
 - A. TWO (2) SAFETY SHIELDS @ 100'0"
 - B. ONE (1) SAFETY SHIELD @ 100'0"
 - C. ONE (1) SAFETY SHIELD @ 100'0"
 - D. ONE (1) SAFETY SHIELD @ 100'0"
 - E. ONE (1) SAFETY SHIELD @ 100'0"
 2. FIRE ALARM & SAFETY EQUIPMENT IN THE SHED FIRE AREA:
 - A. TWO (2) FIRE EXTINGUISHERS @ 100'0"
 - B. ONE (1) FIRE EXTINGUISHER @ 100'0"
 - C. ONE (1) FIRE EXTINGUISHER @ 100'0"
 - D. ONE (1) FIRE EXTINGUISHER @ 100'0"
 - E. TWO (2) FIRE EXTINGUISHERS @ 100'0"
 - F. ONE (1) FIRE EXTINGUISHER @ 100'0"
 - G. ONE (1) FIRE EXTINGUISHER @ 100'0"
 - H. ONE (1) ADDITIONAL FIRE EXTINGUISHER REMOVED @ 100'0" AND @ 147'0"

AutoCAD SHX Text
 BULKHEAD



PLOT PLAN

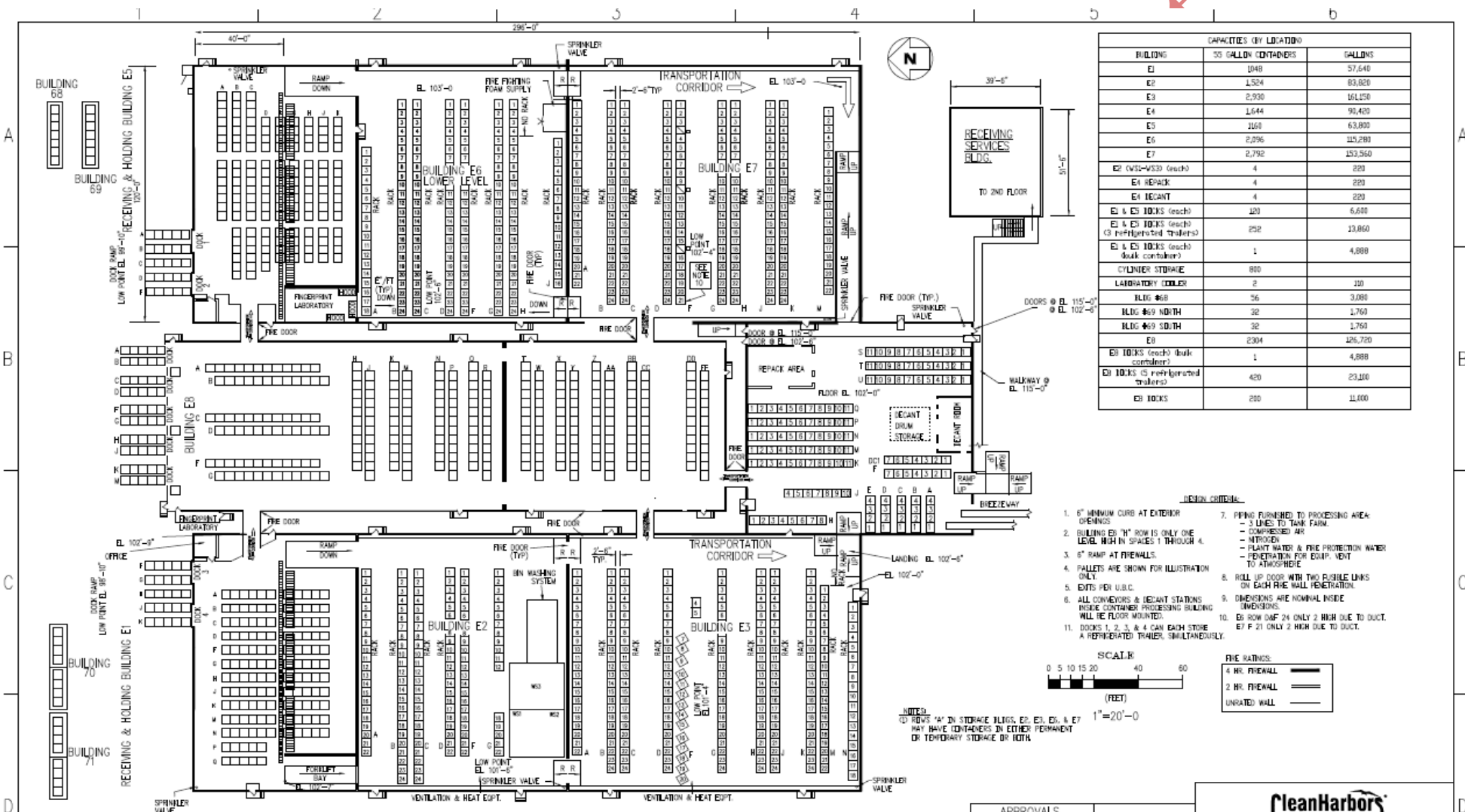
REFERENCE DRAWINGS		REVISIONS		REVISIONS		APPROVALS	
DRAWING NO.	TITLE	NO.	DESCRIPTION	DATE	BY	CHK	DATE
		1	ADDED SHED TOWER AREA AND SAFETY EQUIPMENT	03-12-21	KB	TH	SS
		2	ADDED SHED TOWER AREA NOTES				
		3	ADDED EXPLOSIVE MAGAZINES	04-08-21	KB	TH	MM
		4	AS-BUILT (MODULAR BUILDINGS)	02-10-21	KB	TH	SS
		5	EXTEND S. FENCE LINE, ADD TRAILER CONT. EQUIP.	01-31-22	KB	TH	SS
		6	EXTEND ROAD TO NEW SOUTH FENCE LINE	05-19-22	KB	TH	SS
		7	AS-BUILT (WAREHOUSE EXPANSION)	11-10-22	KB	TH	JSC
		8	REMOVED E-07 SAFETY EQUIPMENT LOCATIONS	06-08-18	MM	CP	
		9	REMOVE TELEPHONE IN C1	02-14-20	JMS	TH	JMS
		10	MOVE BLDG 68, 69, ADD BLDG 70, 71, ADD TO LAND	03-03-21	KB	MM	TH

Clean Harbors

ARAGONITE, LLC
AN EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION EMPLOYER

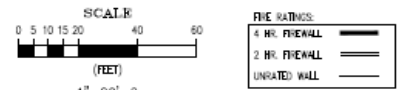
**UTAH ENVIRONMENTAL SERVICE CENTER
 INCINERATION PLANT FOR INDUSTRIAL WASTES
 SAFETY EQUIPMENT PLAN**

FOR: TONNIE SITE	CAD NO: M368
SCALE: 1"=60'-0"	DATE: 12-14-22



CAPACITIES BY LOCATION		
BUILDING	55 GALLON CONTAINERS	GALLONS
E1	1048	57,648
E2	1,524	83,820
E3	2,930	161,250
E4	1,644	90,420
E5	168	9,216
E6	2,896	159,296
E7	2,792	153,560
E7 CWS-WSD (each)	4	220
E4 REPAK	4	220
E4 DECAT	4	220
E1 & E5 100KS (each)	20	1,100
E1 & E5 100KS (each) (3 refrigerated trailers)	252	13,860
E1 & E5 100KS (each) (duck container)	1	4,888
CYLINDER STORAGE	800	
LABORATORY COOLER	2	110
BLDG #69	36	1,998
BLDG #69 NORTH	32	1,760
BLDG #69 SOUTH	32	1,760
E6	2,304	126,720
E7 100KS (each) (duck container)	1	4,888
E7 100KS (3 refrigerated trailers)	420	23,100
E7 100KS	280	14,000

- DESIGN CRITERIA**
- 6" MINIMUM CURB AT EXTERIOR OPENINGS
 - BUILDING E7 "H" ROW IS ONLY ONE LEVEL HIGH IN SPACES 1 THROUGH 4.
 - 6" RAMP AT FIREWALLS.
 - PALLETS ARE SHOWN FOR ILLUSTRATION ONLY.
 - ENTS PER U.L.C.
 - ALL CONVEYERS & DECAT STATIONS INSIDE CONTAINER PROCESSING BUILDING WILL BE FLOOR MOUNTED.
 - DOORS 1, 2, 3, & 4 CAN EACH STORE A REFRIGERATED TRAILER SIMULTANEOUSLY.
 - FIRE RATED TO PROCESSING AREA - 3 LINES TO TANK FARM.
 - COMPRESSED AIR
 - WATER
 - PLANT WATER & FIRE PROTECTION WATER
 - PENETRATION FOR EQUIP. VENT TO ATMOSPHERE
 - ROLL UP DOOR WITH TWO BUOY LINKS ON EACH FIRE WALL PENETRATION.
 - DIMENSIONS ARE NOMINAL INSIDE DIMENSIONS.
 - E6 ROW DAF 24 ONLY 2 HIGH DUE TO DUCT. E7 F 21 ONLY 2 HIGH DUE TO DUCT.



NOTES:
 (1) DOORS 14' IN STORAGE BLDGS. E1, E2, E3, E4, & E7 MAY HAVE CONTAINERS IN EITHER PERMANENT OR TEMPORARY STORAGE OR BOTH.

REFERENCE DRAWINGS	
DRAWING NO.	TITLE

REVISIONS				
NO.	DESCRIPTION	DATE	BY	CHK.
1	AS-BUILT (MODULAR BUILDINGS)	12-10-21	KB	TH
2	AS-BUILT (WAREHOUSE EXPANSION)	11-08-22	KB	TH
3	ADD BLDG #69 & E9	4/20/23	RAD	WC
4	ADD NORTH & SOUTH DESIGNATION TO BLDG #9	03/27/22	TJK	WC
5	MOVE WSH & WSD ADD BEN WASHING SYSTEM	12/21/21	JMK	

REVISIONS				
NO.	DESCRIPTION	DATE	BY	CHK.
6	E1 & E5 LAYOUT, CORRECT BLDG STORAGE, AS BUILT	07-02-20	KB	TH
7	ADDED BLDG STORAGE (CHG LOCATIONS, ADD NOTES)	07-21-20	KB	TH
8	ADDED BLDG STORAGE (CHG LOCATIONS, ADD NOTES)	09-22-21	KB	TH
9	ADD E-8 BLDG, ADD E-8 DOORS, UPDATE TABLE	03-25-21	KB	TH
10	ADD FIRE DOORS TO FORKlift CORRIDORS	07-12-21	KB	SS

APPROVALS	
DRAWN	BY DATE

Clean Harbors
 AMERICAN TANK & EQUIPMENT COMPANY

TITLE: UTAH ENVIRONMENTAL SERVICE CENTER INCINERATION PLANT FOR INDUSTRIAL WASTES CONTAINER STORAGE BUILDING PLAN

DATE: 12/21/21

SCALE: 1"=20'-0"

PROJECT NO: 2019-0000

DATE: 12/21/21

SCALE: 1"=20'-0"

PROJECT NO: 2019-0000

DATE: 12/21/21

Attachment 4 **Sampling and Analysis Plan**

Used Oil Analysis Plan

1.0 Introduction

The purpose of this Used Oil Analysis Plan is to provide the protocols, including, where necessary, sampling and analysis, that will be used by Clean Harbors Aragonite, LLC (Aragonite) to document the regulatory status of used oil and to ensure that the used oil is not a hazardous waste under the rebuttable presumption requirements of R315-15-1.1(b)(1)(ii). This may be accomplished by determining whether the total halogen content of the used oil is above or below 1,000 ppm.

All shipments of used oil handled by this facility will be subjected to these protocols. This is to help ensure that this facility will be in compliance with applicable regulation and this permit. The used oil indicated below will not be subject to the sampling and testing protocols of this Plan:

- Used oil received at the Aragonite facility as on-specification must be accompanied by a certification from a Utah-registered used oil marketer, documenting that the used oil meets the used oil fuel specifications set forth in Section R315-15-1.2 of the Utah Administrative Code (UAC). The marketer certification must be in writing and must accompany the shipment.
- Used oil having a halogen content between 1,000 ppm and 4,000 ppm must have documentation demonstrating that the used oil is not a hazardous waste under the rebuttable presumption requirements of R315-15-1.1(b)(1)(ii) of the UAC. This documentation must be provided to the facility or accompany the shipment.

2.0 Sampling Methodology

Specific sampling procedures are dependent on both the nature of the material and the type of container used to ship the used oil. In addition to American Society for Testing Materials (ASTM) and other EPA approved sampling procedures, the Aragonite facility has instituted specific methodologies for ensuring that samples taken from various types of containers are representative. These methodologies are based on SW-846, Edition V. Used oil can be received at the Aragonite facility in drums, tote tanks, and tank trucks. The sampling devices are selected depending on the size and type of the container and on the specific material involved. The number of samples required for reliable sampling will vary depending on the distribution of the waste components in the container.

Sampling of small containers (i.e., 55-gallon drums) containing flowable materials will be conducted using a COLIWASA unit or equivalent device is used to obtain a full vertical section sample. For non-flowable oil, grab samples are taken from the top of the container. Sampling of large containers and tankers are sampled with a COLIWASA, and weighted bottle or bomb sampler.

When sampling is required, the following procedures shall be followed:

- The Permittee shall collect a representative sample from tanks, totes, drums or other containers to determine the halogen content. Sampling personnel shall be trained on appropriate sampling methods for each type of container and matrix.
- Samples collected from bulk oil containers greater than 55 gallons shall be individual samples, not composited samples.
- A representative composite sample may consist of not more than four drums/containers or 220 gallons, whichever is less, per composite sample from drums or containers from the same source. The individual drum/container samples are consolidated into one representative composite sample and tested.
- Drums or containers of used oil from different sources or processes shall be sampled individually.

3.0 Inbound Used Oil

3.1 Analytical Protocols

Prior to accepting inbound shipments of used oil for storage and subsequent transfer, documents used to ship the used oil to the Aragonite facility will be examined and a determination will be made on whether the shipment meets the criteria described in Section 1.0 or must be tested to determine halogen content. For used oil shipments that will be required to be tested, a representative sample of the oil is taken using the appropriate method described in Section 2.0 and placed in a sample jar. The sample jar will be labeled with information that describes the customer's name, receipt date, and shipping document number.

Testing of the sample is performed using an un-expired Clor-D-Tect[®] or Hydroclor Q[®] test kit. The results are documented on the shipping documents and the identity of the sample is noted on the sample jar along with the test results. If the Clor-D-Tect[®] test or Hydroclor Q[®] test kit results show halogen content greater than 1,000 ppm, the shipment will be presumed to be hazardous waste until it is demonstrated it is not a hazardous waste under the rebuttable presumption requirements of R315-15-4.5 of the UAC. Aragonite personnel will contact the entity that shipped the used oil to determine how the material should be managed from this point forward. Two alternatives exist for managing the material:

1. The used oil will be managed as a hazardous waste. The Aragonite facility will label the container with the appropriate hazardous waste labels and place the material in a permitted on-site hazardous waste storage area until it is shipped off-site for disposal. The facility will also work with the shipping entity to resolve any shipping document, i.e., manifest, issues arising from the shipment. If necessary, the facility will submit an unmanifested waste report to the Utah Department of Environmental Quality (UDEQ).
2. The shipping entity, working in conjunction with the facility, will attempt to rebut the hazardous waste presumption according to the requirements of R315-15-4.5 of the UAC.

When halogen field screening is performed, the following procedures shall be followed:

- The Permittee shall screen used oil or oily water subject to R315-15 of the UAC in accordance with the following requirements:

- CLOR-D-TECT® halogen test kit (EPA Method 9077) for oil containing less than 20% water; or
- HYDROCLOR-Q® test kit if the oil contains between 20% and 70% water using the following conversion formula:

True Halogen Concentration = Reading Syringe + [(10 + ml oil in sample)/10]

Example: sample contains 6 ml water and 4 ml oil (60% water) and the syringe reading is 2,000 ppm, then the true concentration is:

2,000 ppm [(10 ml + 4 ml)/10] = 2,800 ppm

- HYDROCLOR-Q® test kit without correction for oil containing greater than 70% water.
- The requirement for a quality control sample (duplicate) may be satisfied by testing prior to off-loading from permitted vehicles in accordance with the CLOR-D-TECT® kits (Method 9077 of SW846) and is not required for each load collected.

3.2 PCB Contaminated Used Oil

Clean Harbors Aragonite shall obtain analytical results of dielectric oil used in transformers and other high voltage devices, verifying the PCB concentrations are less than 50 mg/kg prior to loading the used oil into the transportation vehicle.

Clean Harbors Aragonite shall determine the PCB concentration of other used oils not specified in 3.3 by written certification from the generator or laboratory testing.

Used oil shall not be diluted to avoid any provision of any federal or state environmental rules.

If PCB concentrations greater than 2 mg/kg have been transported, the Aragonite shall assume that all subsequent loads of used oil are contaminated with PCBs and has a quantifiable PCB concentrations of 2 mg/kg or greater unless the equipment has been decontaminated as described in 40 CFR761 Subpart S.

3.3 Rebuttable Presumption Test

Used oil with total halogen concentrations greater than 1,000 mg/kg is presumed to have been mixed with a hazardous waste and shall be managed as a hazardous waste unless the halogen concentration has been successfully rebutted.

Used oil with halogen concentrations between 1,000 ppm and 4,000 ppm may be accepted, if the Permittee rebuts the hazardous waste presumption or has documentation (analytical data) from a prior used oil handler that the used oil is not a hazardous waste or if the used oil is solely from a Very Small Quantity Generators (VSQG), or a DIYer used oil collection center. The Permittee shall attach any analytical results used to rebut the hazardous waste presumption to the shipping documents.

The Permittee may rebut the hazardous waste presumption in accordance with R315-15-4.5 of the Utah Administrative Code if the Permittee can demonstrate that the halogens in the used oil originated from sources other than halogenated hazardous constituents listed in Appendix VIII of 40 CFR 261.

If the additional testing shows that used oil has been mixed with a listed hazardous waste described in R315-261 of the Utah Administrative Code, the mixture is subject to regulation as a hazardous waste if the concentration of any individual compound listed in R315-261 Appendix VIII is greater than or equal to 100 mg/kg (ppm).

The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins if they are processed through a tolling arrangement as described in R315-15-2.5(c) of the Utah Administrative Code to reclaim metalworking oils/fluids. The rebuttable presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner or disposed.

The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units if the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

Attachment 4: Table 1 – PCB Sample Preparation and Analytical Methods

Sample Preparation Methods	Analytical Method	Analytes *	
		PCB CAS RN	PCB Aroclor®
3500C (General) 3580A (Preparation) 3665A (Cleanup)	8082A	12674-11-2	1016*
		147601-87-4	1210
		151820-27-8	1216
		11104-28-2	1221*
		37234-40-5	1231
		11141-16-5	1232*
		71328-89-7	1240
		53469-21-9	1242*
		12672-29-6	1248*
		165245-51-2	1250
		89577-78-6	1252

		11097-69-1	1254*
		11096-82-5	1260*
		37324-23-5	1262
		11100-14-4	1268

* Note: Analyses of the Aroclors® bolded/* in the last column are mandatory to analyze. Choose an additional two Aroclors® from the last column for analysis which could be contained in the oil. A total of seven Aroclors® are required.

4.0 Recordkeeping

The Aragonite facility will maintain records of used oil receipts and shipments either in “hardcopy” paper records at the facility or through electronic records, including scanned documents, readily accessible at the facility. Laboratory and other test results will be maintained for a minimum of three years. Retained samples of used oil receipts, if required, will be maintained at the facility up to the time that they are burned for energy recovery or disposed as hazardous waste by the ultimate receiving facility.

Aragonite will automatically extend the period of retention of these or any other records if requested by the EPA, or UDEQ, or in the event of an unresolved enforcement action regarding regulated activity.

Draft for Pub.

Attachment 5 Emergency Spill Plan

Used Oil Contingency/Spill Control Plan

1.0 Facility Information

Facility Name: Clean Harbors Aragonite, LLC
Facility Operator: Clean Harbors Aragonite, LLC
Location: 11600 North Aptus Road, Aragonite, UT 84022

The facility is designed as a transfer and storage facility of on-specification and off-specification used oil as defined in R315-15-1.5 of the UAC. Used oil is stored in container storage buildings and in other permitted storage areas. Used oil is shipped to other locations for energy recovery or disposal.

The facility also operates as a transfer, storage, and treatment facility (TSDF) of RCRA, TSCA, and nonhazardous wastes. This plan mirrors the facility's State-issued RCRA Part B Permit Contingency Plan.

2.0 Purpose

This Contingency Spill Control Plan (Contingency Plan) outlines the emergency procedures that will be employed to minimize risks to human health and the environment.

3.0 Emergency Coordinators

The names of those persons qualified to act as Emergency Coordinator at the facility are provided in Table 1. All emergency coordinators have the authority to call on onsite resources or outside assistance to respond to an emergency and to commit requisite resources to implement this plan. At least one of the individuals qualified to act as emergency coordinator is onsite at all times.

The on-site shift supervisor, also identified as the incinerator supervisor, is normally the emergency coordinator. When no Shift Supervisor is on site, another qualified individual (identified with an asterisk (*) on the Table 1) will be designated as the emergency coordinator. The Control Board Operator (CBO) will know the identity of the emergency coordinator.

The duties of the emergency coordinator are to assess the situation and take steps necessary to protect human health and the environment. The emergency coordinator is responsible for the coordination of containment and recovery operations following an emergency or a major emergency. The responding emergency coordinator is responsible for the complete written report of the incident. The environmental manager will be responsible for forwarding the report to the appropriate regulatory agencies.

Attachment 5: Table 1 – Emergency Call List

Patrick Brady
Jose Silva
David Mota
Ben Forrester
Jim Saddler
* Guy Thomas
*David Yadon
* Bryce Hammond
*Mark Shoemaker
* Jesse Davis
* Cammeron Whitehouse
* Willard Hammond
*Gary Johansen

* Other personnel qualified to be emergency coordinator.

Emergency Coordinators can be reached onsite by radio or dialing 333 or from offsite by calling 435-844-8352 or 435-844-8355.

4.0 Definitions

Major Emergency: Any explosion, fire, spill, discharge, or natural disaster which threatens human health or has damaged or destroyed, or threatens to damage or destroy, plant property, or impair plant operations, or results in a discharge of waste material into the environment and is beyond the capability of on-site personnel and equipment to control. A major emergency may originate from an on-plant event, such as spills, fires, explosions, and so on, or an off-plant incident, such as an aircraft crash on plant property, fire from neighboring property, or natural disasters.

Emergency: Similar to a major emergency except that no outside assistance is needed or summoned to deal with the situation. This includes spills or discharges outside of containment areas reportable under section 11.0 of this plan, explosions, or fires (except authorized fires) in areas where waste management occurs (i.e., areas south of main street, truck staging areas, the lab, and so on).

Spill or Discharge: A spill is defined as any release which includes any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment. This definition applies to all materials that are released (i.e., hazardous, and non-hazardous waste, raw materials, by-products, residues, and so on). Specifically excluded from the definition of "release" is any release which does not enter the environment or any federally permitted release (e.g., permitted air emissions).

Contained Spill or Discharge: A spill or discharge which is contained means that the spill is contained within an area which provides a barrier to prevent a release from contacting the ground or surface waters. This includes paved areas where no runoff occurs, secondary containment structures and the inside of buildings.

Emergency Signal: An audible alarm initiated by the emergency coordinator, alerting all personnel on site that an emergency or a major emergency exists. The fire alarm is a siren (undulating), whereas the plant evacuation signal is a yeow (warbling high-low) blast.

Shutdown of Operations: Curtailing of incinerator operations, with the exception of the air pollution control system, by stopping all waste feed to the incinerator. Buildings are closed to prevent wind or rain from entering, and all unloading operations are ceased, as needed. Maintenance and contractor's machinery will be shut down, as needed.

North Assembly Point: The parking area to the north of the administrative building.

South Assembly Point: The area south of the plant.

West Assembly Point: The area west of the plant.

Authorized Fire: An approved (authorized) fire/open flame within any portion of the facility, such as fire set for fire response training, designated smoking areas, or in the incinerator.

5.0 Spill Prevention

The facility provides secondary containment for all used oil container storage areas. Detailed information on these areas is provided in this permit. For container storage areas the secondary containment volume provided will be at least 10% of the total permitted storage volume, or the volume of the largest container, plus sufficient freeboard to allow for precipitation and fire sprinkler water. In addition, the secondary containment systems have no drain valves or other openings outside of containment.

Inspections of used oil container storage areas will be conducted on a routine basis, in accordance with the facility's Part B Permit inspection matrix, to ensure that there are no spills or leaks which could escape containment and reach the environment. These inspections will be conducted and documented as part of the inspection program required by the facility's State-issued Part B Permit. These inspection records are kept as part of the facility operating records.

Inspection and corrective action records will be maintained electronically or on paper logs and will be retained on-site as part of the facility operating record for a period of three (3) years. The records will be made readily available for review by a duly authorized regulatory inspector.

Truck transfer operations shall occur within permitted contained areas. The vehicle shall be observed during the transfer operations and the units inspected as part of the General Facility Inspection Plan required by the facility State-issued RCRA Part B Permit while in storage. The inspections shall include leak checks, integrity of the secondary containment system.

All personnel involved with handling used oil will receive operational, safety, and spill prevention training (as described herein). The training includes, but is not limited to the following:

1. Operational and maintenance equipment to prevent the discharge of used oil.

2. Discussion of applicable pollution control laws, rules, and regulations.
3. Safety and evacuation measures required in the event of a release, fire, or explosion at the facility.
4. Emergency notification and spill control procedures in the event of discharge of used oil to the environment.

The facility will schedule and conduct spill prevention briefings for operating and maintenance personnel at least every 12 months. These briefings will highlight and describe known spill events, equipment malfunctions, and recently developed precautionary measures. The briefings may be included as part of other training programs and will include all individuals whose activities are affected by the requirements of this Contingency/Spill Control Plan.

6.0 Implementation of the Contingency/Spill Control Plan

The Contingency/Spill Control Plan (Contingency Plan) will be implemented at Aragonite whenever there is a major emergency, emergency, whenever there is a contained spill or discharge which threatens human health (i.e., a spill or discharge resulting in one or more individuals requiring medical treatment or evaluation), or any other time the emergency coordinator feels it is appropriate. The purpose of this Contingency Plan is to outline the actions which operating personnel will take in response to emergencies such as fires, explosions, leaks, spills, natural disasters, or discharges of hazardous substances. It establishes guidelines for the orderly handling and reporting of emergency situations which occur or could foreseeably develop at the Aragonite facility.

Minor spills of used oil (those that are less than 25 gallons in volume), spills that occur in secondary containment, or de minimus spills may not require full implementation of the Contingency Plan. This determination will be made by the emergency coordinator as part of his assessment of the situation. All spills of used oil, including minor spills, and any residue, or contaminated soil, water, or other material resulting from the spill will be cleaned up to the point that the spilled material, residue, or contaminated soil, water, or other material does not present a hazard to human health or the environment. As discussed in 12.0 below, Clean Harbors Aragonite shall immediately notify the Utah State Department of Environmental Quality 24-hour Answering service at (801) 536-4123 for used oil releases exceeding 25 gallons or smaller releases that pose a potential threat to human health or the environment.

6.1 Assessment/Notification

Any person discovering a situation which may require implementation of the Contingency Plan (e.g., fires, spills, and so on) shall immediately warn others working nearby and notify the emergency coordinator.

The emergency coordinator will appraise the situation and determine whether to initiate the full Contingency Plan or whether only specific aspects of the Plan (i.e., spill response/cleanup measures) are required to address the situation. The emergency coordinator will notify personnel on site of the situation through radios or cell phones. The emergency coordinator is also responsible for making the initial notifications specified in Section 12.0 of this Plan.

Should the situation result in the spill or discharge of used oil, the spill prevention control and countermeasures procedure shall be followed.

If there is a spill or discharge, the worker(s) discovering it will immediately notify the emergency coordinator and assess the characteristics of the spill or discharge and promptly initiate a plan to stop the source of the leak. The Emergency Coordinator will initiate measures so as to protect human health and the environment.

Information about used oil stored on-site is tracked in the tracking database or through hardcopy paper records. All used oil stored on-site is tracked by facility personnel.

6.2 Evacuation Plan

In the event that an evacuation is necessary, an evacuation signal will be sounded. The evacuation routes should be upwind or crosswind of the emergency and culminate at the designated assembly point(s). The CBO, who can be reached by dialing 333, will announce the appropriate assembly point(s) over the plant PA system and radios. All non-essential personnel, visitors, and contract personnel shall evacuate the area and assemble at the appropriate assembly point(s).

The facility has a system for identifying everyone within the facility. The designated person at the assembly point(s) will notify the emergency coordinator of any personnel that are known to be missing. Visitors shall be the responsibility of their Clean Harbors Aragonite contact for accountability.

6.3 Control Procedures

6.3.1 Spills or Discharges

Spilled material will normally be contained in the area where the spill occurs. All spills will be collected and subsequently transferred to approved storage or to a 90-day accumulation area.

Spills may also occur outside of the containment berms, such as where the containment area has been damaged, or the spill occurred when the waste was not in a containment area. All material will be kept from entering storm drains, water courses, wells, water systems, and navigable waterways, if possible.

Incompatible wastes are segregated via concrete curbs, containment bays, and fire doors. Thus, the probability of incompatible wastes commingling is not high, and, if possible, spills will be segregated and will be cleaned up immediately to prohibit commingling of wastes.

The following steps are taken to contain and clean up spills and discharges: Dress in appropriate protective equipment.

Prevent further leaking by repositioning the container, overpacking, applying a temporary seal to the leak, or closing master valves or pet cocks on any tanks that might be leaking. Simple overpacking for containers is the preferred method.

Prevent the spill from spreading by trenching or encircling the area with a dike of sand. Absorbent material, or, as a last resort, dirt or rags, or other suitable material. If the spill is in an outside area and it is raining or rain is imminent, cover the spill with plastic sheeting, if feasible.

The spill area is cleaned up and tested for contamination, as appropriate. If the spill area is not in a containment area (i.e., on dirt) the contaminated material will be removed.

- Dress in appropriate protective equipment.
- Prevent further leaking by repositioning the container, overpacking, or applying a temporary seal to the leak. Simple overpacking for containers is the preferred method.
- Prevent the spill from spreading by trenching or encircling the area with a dike of sand, absorbent material, or, as a last resort, dirt or rags, or other suitable material. If the spill is in an outside area and it is raining or rain is imminent, cover the spill with plastic sheeting, if feasible.
- The spill area is cleaned up and tested for contamination, as appropriate. If the spill area is not in a containment area (i.e., on dirt) the contaminated material will be removed.

6.3.2 Explosions

In the event of an explosion- the emergency coordinator will immediately shut down all equipment that may be affected and initiate waste feed cut-offs as necessary. If the explosion occurs where liquids are stored and a spill occurs, procedures for spill containment will commence. Explosions involving other plant areas will require evacuation, possible first aid for injured personnel, securing the area to prevent unauthorized entry, and assessment of damages.

In all cases, the emergency coordinator must be notified as soon as equipment and waste storage areas are secured.

6.3.3 Fires

In the event of a fire, the automatic sprinkling system and water cannons may be activated. Fire extinguishers are located in all buildings and on the perimeter of the process equipment. In the event a fire cannot be extinguished using the stationary equipment, fire hoses may be hooked to the hydrants or the fire truck and activated. The water falling on the hazardous waste storage area would primarily be contained through the containment sump systems.

7.0 Prevention of Recurrence or Spread of Fires, Explosions, or Releases

During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that additional fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting, and containing release waste, and removing or isolating containers.

If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

In order to protect the facility from the possibility of range fires, a firebreak will surround the entire facility.

8.0 Storage and Treatment of Spilled or Discharged Material

Post event sampling and analyses will be performed as needed after containment, clean-up, and decontamination procedures have been completed. Containers of collected spilled oil, containment booms, and/or contaminated soil will be stored in unaffected container storage areas until they are sent off site for disposal or recycling.

9.0 Emergency Equipment

D-034-M-005 shows the location of the plant emergency equipment.

10.0 Post-Emergency Equipment Maintenance

All equipment used during an emergency, major emergency, or contained spill or discharge will be cleaned and/or replaced, when necessary, to prepare for any future use. The emergency equipment will be checked as necessary for completeness and operability.

11.0 Coordination Agreements

Clean Harbors Aragonite has negotiated a written agreement with Tooele County. Representatives of Tooele County have been contacted, have received a copy of this Contingency Plan, and have received a plant walk-through to familiarize them with the plant layout and function. Annual reorientation is offered at the plant site for Tooele County representatives. By the terms of the written agreement, Tooele County has agreed to provide the following services:

- Tooele County Road Maintenance,
- Routine Law Enforcement,
- Fire Response,
- Public Health,
- Public Safety,
- Hospital Isolation Unit, and
- Telecommunications.

Clean Harbors Aragonite has also negotiated agreements with other local agencies to provide assistance in the event that additional equipment and manpower are required at the plant. Representatives of each agency below have been contacted. Each has received a copy of this Contingency Plan and has received a plant walk-through to familiarize each agency with the plant layout and function. Also, annual re-orientation is offered at the plant site to the following agencies:

Tooele County Sheriff's Department*
435-882-5600

Tooele County Emergency Management
435-833-8100

* The Sheriff's Department is the designated primary coordinating agency.

The following agencies may be used for additional resources should the need arise:

U.S. Bureau of Land Management Salt Lake District Office
801-977-4300

Mountain West Medical Center
435-843-3600

University of Utah Hospital
801-581-2121

Air-med University of Utah
801-581-2500

Spill contractors that may be contacted, as necessary:

Veolia
801-294-2992

Clean Harbors Field Services
435-843-4840

Other emergency assistance and advice can be solicited from:

Clean Harbors Transportation

Related Emergencies
800-645-8265

National Response Center
U.S. Coast Guard
400 Seventh Street, S.W.
Washington, D.C. 20510
800-424-8802

ChemTree (Chemical transportation Emergency Center)
800-262-8200

Chlorex, which is part of ChemTree (Chlorine Incidents)
800-424-9300

National Pesticide Information Center
800- 8 5 8-73 7 8

This plan will be reviewed annually, updated as necessary, and forwarded to Tooele County Emergency Management and the Tooele County Health Department.

12.0 Required Notifications and Reports

As required by R315-15-9 UAC, Clean Harbors Aragonite shall immediately notify the Utah State Department of Environmental Quality 24-hour Answering service at (801) 536-4123 for used oil releases exceeding 25 gallons or smaller releases that pose a potential threat to human health or the environment. The notification will include: Name and telephone number of reporters; name and address of facility; time and date of the release; location of the release; description and quantity of material(s) involved, to the extent available; the cause of the release, if known at the time; the extent of injuries, if any; and the possible hazards to human health or the environment, and the action taken to minimize the hazard.

Clean Harbors Aragonite will record in the operating record any incident that requires implementing this Contingency Plan. In addition, Clean Harbors Aragonite will submit a written report to the Director of the Division of Waste Management and Radiation Control (Director) within 15 days after an incident that required implementation of the Contingency Plan. The report will include: Name, address, and telephone number of the facility; date, time, and type of incident; name and quantity of material(s) involved; the extent of injuries, if any; an assessment of actual or potential hazard to health or the environment, and the estimated quantity and disposition of recovered material that resulted from the incident.

Spills on site involving reportable quantities (RQ) will be reported to the National Response Center, the Utah Division of Waste Management and Radiation Control, and the Tooele County Office of Engineering and Department of Emergency Management.

If plant operations were suspended due to Contingency Plan implementation, operations will resume after plant management has determined that all safety-related questions have been satisfactorily addressed.

State officials will be notified that the facility is in compliance with the permit and R315- 15 prior to resuming operations.

Reports to the Director of DWMRC shall be sent to:

Director
Utah Division of Waste Management and Radiation Control
P.O. Box 144880
Salt Lake City, Utah 84114-4880

Or hand delivered to:

Director
Utah Division of Waste Management and Radiation Control 195 North 1950 West
Salt Lake City, Utah 84116

Or sent via email to:

dwmrcsubmit@utah.gov

Reports to EPA Region VIII shall be submitted to:

Regional Administrator
U.S. EPA Region VIII 1595 Wynkoop Street
Denver, Colorado 80202

Reports to Tooele County shall be submitted to:
Tooele County Department of Emergency Management and Department of Engineering
47 South Main
Tooele, Utah 84074

13.0 Emergency Equipment

The following is a list of the emergency equipment, spill control equipment, communication systems, alarm system, and decontamination equipment which may be utilized at the facility.

- Internal facility communications systems. Communications inside the Aragonite facility are achieved through a telephone system, cell phones, and CB radios. There will be telephones located so that each employee will have access to one from his/her workstation. From each telephone an employee can call any other telephone in the Aragonite facility and can be connected to an outside phone line. The telephone system is equipped with an uninterruptible power supply for reliability during a loss of primary power. Two-way radios are available at each waste management unit, and to various operations and/or management personnel based on operational requirements to supplement the telephone system. Cell phones may also be used.
- External facility communications systems. The Aragonite facility is connected to the local telephone system and cell phone networks.
- Overpack drums. An overpack drum is a container large enough to hold a standard 55-gallon drum. They are available at the facility and are used to hold smaller containers which are damaged or leaking.
- Absorbent agents. Absorbent agents are dry powders, granular materials, mats or pads, etc., which can reduce or stop the spread of spilled liquids and allow the spilled material to be recovered as a solid. The locations of spill kits are shown on the emergency equipment diagrams in Clean Harbors Aragonite's State-issued RCRA Part B Permit.
- Fire water system. The fire water system consists of a water tank, pumps, water pipes, hose stations, monitors, hydrants, and building sprinkler systems. The fire water pumps are rated to provide the required volume at a pressure high enough to operate foam equipment.
- Fire extinguishers. Fire extinguishers of various sizes from 2½ to 50 pounds, rated for Class A, B, and C fires, are located at locations shown on the emergency equipment diagrams in Clean Harbors Aragonite's State-issued Part B Permit. Fire extinguishers for Class D (combustible metals such as magnesium or sodium) fires are also available. These fire extinguishers are operated by pulling a pin and squeezing the handle lever while directing a short hose or the extinguisher nozzle at the burning surface.

- Vacuum truck. There will be at least one vacuum truck at the Aragonite facility for picking up liquids from the various sumps throughout the facility. If solids need to be picked up, conventional equipment such as brooms, shovels, vacuums, front-end loaders, and so on will be used.
- Safety shower and eye wash stations. There are several locations where a supply of water will be available through shower heads and bubblers for employees to flood themselves with water if they are sprayed with a hazardous substance. These stations operate by simple pull handles and foot pedals. At least one safety shower and eye wash station will be located in or near each waste management area. Portable units may be used in these locations in lieu of hard piped units.
- Self-contained breathing apparatus (SCBA). A number of devices consisting of a portable cylinder of compressed breathing air, pressure regulator, hose, full-face mask, and carrying harness are available. Response personnel can use the SCBAs to enter an area where smoke or gases make the ambient atmosphere dangerous to breathe. Each SCBA can supply approximately one-half hour of air.
- Negative Pressure Respirator (NPR). There are two types of NPRs, full face and half face. They are both equipped with fittings to which air contaminant-specific cartridges are attached. Air to be inhaled by the wearer is filtered through the cartridge and the specific contaminants are removed. Each employee will be issued a mask and cartridges appropriate for his work area. The mask will be fit-tested on the employee when the mask is issued, whenever the model or size of the mask changes, and at least annually. Cartridges for other contaminants and both styles of masks will be available to employees as necessary.
- Cartridge air mask. There are two types of cartridge masks, full face and half face. They are both equipped with fittings to which air contaminant-specific cartridges are attached. Air to be inhaled by the wearer is filtered through the cartridge and the specific contaminants are removed. Each employee will be issued a mask and cartridges appropriate for his work area. When the mask is issued, if the model or size of the mask changes, and at least annually, the mask will be fit-tested on the employee. Cartridges for other contaminants and both styles of masks will be stocked at the safety equipment storage area.
- First aid stations and first aid kits. The first aid stations on site will contain sufficient medical supplies to treat injury conditions ranging from minor injuries to major injuries for which an emergency medical technician (EMT) is qualified to treat. Medicine will be available to help employees alleviate symptoms of minor illnesses i.e., headaches, hay fever, colds, and so on. First aid kits which include a supply of materials necessary for a person to treat severe bleeding and give CPR, i.e., heavy bandages, latex gloves, mouth to mouth resuscitation mask will be available.
- Protective clothing. Employees working at the Aragonite facility will be issued hard hats, safety footwear and safety glasses. Other protective clothing, such as protective coveralls, waterproof safety boots and specialized gloves are provided based on the requirements of the area or job function being performed. The hard hats are made of high impact plastic. The protective coveralls are made from polyethylene fibers (such as Tyvek or equivalent) and are disposable. The waterproof safety boots are solvent resistant synthetic rubber. The gloves are latex rubber, synthetic rubber, or knit (cotton, polyester, and so on) depending upon the specific job requirements. A supply of the job or area specific protective clothing will be available for each waste management unit and kept at the safety

equipment storage area.

- Portable pumps. A number of portable pumps for removing liquids from sumps shall be kept at the Clean Harbors Aragonite facility. The type of pump may include centrifugal, diaphragm, piston (trash pump), submersible, and so on. Gasoline, air, or electricity may be used to power these pumps.
- Hand tools. Brooms, buckets, absorbent materials, and detergent will be kept at the facility. These may be used in spill control and decontamination activities. Decontamination kit, shovels, brooms, detergent, and absorbent towels will be kept in or near each waste management area. These may be used in spill control and decontamination activities.
- Spill kit. Shovels, brooms, and absorbent materials will be kept in or near each waste management area. These may be used in spill control and decontamination activities.

Attachment 5: Table 2 – Minimum Required Emergency Spill Equipment for Transfer Facilities

Equipment Description	Quantity
Shovel / Broom	1 each
Buckets	2
Spill Absorbent Pads	10
Granulated Absorbent	2 ft ³
Absorbent Boom/oil sock	1
Emergency Controls Spill Plan (with contact numbers)	1
First Aid Kit and Fire Extinguisher	1 each

Draft for Public Comment

Attachment 6
Waste Disposal

Management of Waste Liquids, Solids and Sludges

1.0 Disposal of Waste Liquids, Sludges and Solids

Clean Harbors Aragonite, LLC, (Aragonite) facility will be used as an on-specification and off-specification used oil transfer facility for the purposes of facilitating the movement of used oil to destination facilities where it will be burned for energy recovery, recycled or managed as hazardous waste.. The majority of the used oil will be simply shipped off-site in the same container in which it was received. In this case, no waste liquids, sludges, or solids will be produced.

In those cases where waste liquids, sludges, or solids will be produced, these will be characterized and disposed. No POTW's or similar facilities will be used to manage these residues or rinse waters.

Draft for Public Comment

Attachment 7

Closure Plan

The Clean Harbors Aragonite used oil transfer facility shall be closed in a manner that minimizes the need for further maintenance and eliminates, minimizes, or controls the possible hazards to human health and the environment in accordance with Clean Harbors Aragonite's, LLC State-issued RCRA Part B Permit Attachment 7 and this permit, with the following amendments:

1. In addition to the Closure Plan found in the Permittee's State-issued RCRA Part B Permit, the facility shall be closed in accordance with R315-15-11 of the Utah Administrative Code and conditions in I.K, I.L, and II.G of this permit.
2. The itemized task cleanup and closure costs for financial assurance, required by I.K of this Permit, can be found in Attachment 7 of the Permittee's State issued Part B Permit (See the following attachments as reference). The financial assurance for closure is provided under Permittee's State-issued Part B Permit.
3. In addition to the sampling requirements found in Clean Harbors Aragonite's, LLC State-issued RCRA Part B Permit. The location of any used oil spills shall be determined by checking the Permittee's spill records.

Attachment 7 - Attachments

Note: The following pages are provided as reference, while the current closure plan is found in the Permittee's State issued RCRA Part B Permit.

- Section II Title
 - Area Summary (Page 42)
- Section III Title
 - Container Storage (Page 43)
 - Tank Farm (Page 44)
 - Bulk Solids (Page 45)
 - Sludge Tanks (Page 46)
 - Kilns (Page 47)

Area Summary

Area	Activity									Total
	Removal of Waste	Decontamination	Transportation and Disposal of Decon Fluid	Sampling and Analysis	Transportation of Waste in Storage	Treatment and Disposal	¹ Engineering Expense	Certification of Closure	² Contingency Allowance	
Container Storage	\$ -	\$ 232,448	\$ 312,505	\$ 140,648	\$ 977,792	\$ 8,011,064	\$ 483,723	\$ 22,000	\$ 1,018,018	\$ 11,198,198
Tank Farm	\$ 14,393	\$ 285,940	\$ 82,929	\$ 23,421	\$ 237,082	\$ 669,100	\$ 65,644	\$ 22,000	\$ 140,051	\$ 1,540,560
Bulk Solids	\$ 7,741	\$ 123,519	\$ 80,882	\$ 33,825	\$ 206,283	\$ 1,043,000	\$ 74,763	\$ 12,600	\$ 158,262	\$ 1,740,875
Sludge Tanks	\$ 11,113	\$ 63,218	\$ 42,063	\$ 5,283	\$ 14,820	\$ 225,900	\$ 18,120	\$ 9,940	\$ 39,046	\$ 429,503
Kiln	\$ 140,351	\$ 529,086	\$ 228,928	\$ 232,563	\$ 198,059	\$ 463,800	\$ 89,640	\$ 21,760	\$ 190,419	\$ 2,094,606
Totals	\$ 173,598	\$ 1,234,211	\$ 747,307	\$ 435,740	\$ 1,634,036	\$ 10,412,864	\$ 731,890	\$ 88,300	\$ 1,545,796	\$ 17,003,742

Notes

¹5% of subtotal of removal of waste, decontamination, transportation and disposal of decon fluid, sampling and analysis, transportation of waste in storage and treatment and disposal.

²10% contingency allowance was used.

Container Storage Area Cost

Activity	Summary Totals
Decontamination	\$ 232,448
Transportation and Disposal of Decon Fluid	\$ 312,505
Sampling and Analysis	\$ 140,648
Transportation of Waste in Storage	\$ 977,792
Treatment and Disposal	\$ 8,011,064

Entered in values

Container Storage Area	Activity								
	Sampling and Analysis				Transportation of Waste in Storage		Treatment and Disposal		
	PCB Samples Required	Cost	Rinse Samples Required	Cost	Number of Containers/Gallons/Pounds ^{a,c,d,e,f}	Number of Trucks/Rail Cars/Flat Cars	Cost	^h Tons of Waste	Disposal Cost for Waste
E1	110	\$ 8,690	3	\$ 1,653	1048				\$ 498,848
E2	110	\$ 8,690	2	\$ 1,102	1536				\$ 731,136
E3	110	\$ 8,690	2	\$ 1,102	2930				\$ 1,394,680
E4	93	\$ 7,347	2	\$ 1,102	1652				\$ 786,332
E5	110	\$ 8,690	3	\$ 1,653	1160				\$ 552,160
E6	110	\$ 8,690	2	\$ 1,102	2096				\$ 997,696
E7	110	\$ 8,690	2	\$ 1,102	2792				\$ 1,328,992
Building 68	3	\$ 237	2	\$ 1,102	56				\$ 26,656
Building 69	2	\$ 158	2	\$ 1,102	56				\$ 26,656
Building 70 East/West	3	\$ 237	2	\$ 1,102	64	183	\$ 895,103		\$ 30,464
Building 71 East/West	3	\$ 237	2	\$ 1,102	64				\$ 30,464
Brownsay	65	\$ 5,135	3	\$ 1,653	256				\$ 121,856
Silica Tower Storage Area/Conveyor	30	\$ 2,370	8	\$ 4,408	144				\$ 68,544
Slag Pad	0	\$ -	0	\$ -	12				\$ 5,712
E1 Dock	13	\$ 1,027	2	\$ 1,102	168				\$ 79,968
E5 Dock	13	\$ 1,027	2	\$ 1,102	168				\$ 79,968
E4 Dock	6	\$ 474	2	\$ 1,102	141				\$ 67,116
Drum Pumping Storage	0	\$ -	0	\$ -	12				\$ 5,712
Cylinder Storage Area	0	\$ -	0	\$ -	213				\$ 101,388
Drum Pumping Station	1	\$ 79	2	\$ 1,102	4				\$ 1,904
Laboratory Cooler	1	\$ 79	2	\$ 1,102	2				\$ 952
Drive Through Direct Burn Station ^g	5	\$ 395	2	\$ 1,102	7500				
Drive Through Corrosive Direct Burn Station ^g	5	\$ 395	2	\$ 1,102	7500	2	\$ 14,820	159	\$ 200,340
Truck Unloading ^g	39	\$ 3,081	5	\$ 2,755	22920				
Bulk Solids Pad ^g	310	\$ 24,490	3	\$ 1,653	23760	3	\$ 29,469	153	\$ 108,500
ATF Magazines (1 each) ^g	11	\$ 869	4	\$ 2,204	90000	3	\$ 38,400	45	\$ 765,000
Subtotal	1263	\$ 99,777	61	\$ 33,611	14574	191	\$ 977,792	359	\$ 8,011,064
5% Contingency for Sampling	1327	\$ 104,833	65	\$ 35,815					

Notes

¹See Decon Summary and Transportation and Disposal of Decon Fluid Tables for information on how these values were calculated.

²E2 includes 4 containers for WS1, WS2, WS3.

³E4 includes 4 containers for repack and decon.

⁴PCB wipes will only be used to determine PCB decontamination and rinse water samples to verify RCRA decontamination. No PCB samples needed for cylinder storage area since no PCBs would have been stored there. There are no PCB samples for the Slag Pad and Drum Pumping areas since this is portable containment. Added a 5% contingency to sample amounts to account for cost of potential samples at other areas of the facility or resampling.

⁵Maximum number of containers allowed to be stored in storage area. Number of trailers calculated by assuming capacity of trailer is 80 containers. Assuming it would be destroyed at the Clean Harbors Deer Park facility.

⁶Tankers and containers are stored in these areas. Used the highest amount of gallons that can be stored in that area. Assuming it would be disposed of as bulk liquid in a rail car. A rail car can hold 20,000 gallons. Assumed it is being destroyed at the Clean Harbors Deer Park facility.

⁷Containers, roll offs and trailers can be stored in this area. Used the highest amount of gallons that can be stored in this area. Assuming waste would be disposed of as bulk solids in roll-offs (12 tons each) which would be carried by flat car (6 roll-offs per flat car). Assumed it is being destroyed at the Clean Harbors Deer Park facility.

⁸Maximum ATF Magazines waste storage capacity is by the pound. It is assumed that 30,000 pounds of explosives can fit on one trailer. Assumed it is being destroyed at the Clean Harbors Colfax facility.

⁹Maximum capacity of the E-4 receiving dock is 7,749 gallons for a bulk container. Converted that amount to 55-gallon equivalent containers.

¹⁰Waste Disposal calculations for the Drive through Direct Burn Station, Drive Through Corrosive Direct Burn Station, Truck Unloading, Bulk Solids Pad, and ATF Magazines requires a conversion to tons.

¹¹Every calculation is rounded up to its nearest whole value.

Tank Farm

Activity	Summary Totals
Removal of Waste	\$ 14,393
¹ Decontamination	\$ 285,940
¹ Transportation and Disposal of Decon Fluid	\$ 82,929
Sampling and Analysis	\$ 23,421
Transportation of Waste in Storage	\$ 237,082
Treatment and Disposal	\$ 669,100

Entered in values

Tank Farm Area	Activity																
	Removal of Waste				² Sampling and Analysis				Transportation of Waste in Storage								
	² Capacity	Mandays to Remove	Cost of Manpower	Equipment Cost	³ PCB Samples Required	Cost	² Rinse Samples Required	Cost	⁴ Number of Containers	Number of Trucks	Cost	⁵ Number of Rail Cars for Bulk Liquid Waste	Cost	Number of Tanks	⁶ Tank Scrap (Tons)	Number of Roll off Boxes	Cost
¹ Tank Farm	599956	26	\$ 7,696	\$ 6,697	142	\$ 11,218	20	\$ 11,020	34	1	\$ 4,892	30	\$ 222,300	16	160	14	\$ 9,890
Subtotal	599956	26	\$ 7,696	\$ 6,697	142	\$ 11,218	20	\$ 11,020	34	1	\$ 4,892	30	\$ 222,300	16	160	14	\$ 9,890
⁵ % Contingency for Sampling					150	\$ 11,850	21	\$ 11,571									

⁷ Treatment and Disposal	¹⁰ Tank Farm Capacity (Gals)	Tons	Cost
Aqueous Waste	149,182	623	\$ 311,500
High BTU Waste	450,774	1880	\$ 338,400
Scrap Metal	-	160	\$ 19,200
		Subtotal	\$ 669,100

Notes

¹See Decon Summary and Transportation and Disposal of Decon Fluid Tables for information on how those values were calculated.

²Tanks and piping will be emptied, flushed, then rinsed prior to dismantling. Tanks and piping will then be cut up for disposal as RCRA waste. Volume of waste based on tank volumes and pipe system lineal footage.

³PCB wipes will only be used to determine PCB decontamination and rinse water samples to verify RCRA decontamination. Added a 5% contingency to sample amounts to account for cost of potential samples at other areas of the facility or resampling.

⁴The tank farm is comprised of four identical containment areas, and two pump houses. These unit containment areas will be sampled individually: 25 per containment area, 10 per pump house, 10 miscellaneous structural steel, 12 miscellaneous piping, strainer, pump samples.

⁵The tank farm is comprised of four identical containment areas, and two pump houses. These unit containment areas will be sampled individually: 4 per containment area and 2 per pump house.

⁶It is expected that approximately 34 drums of waste from the tank farm will be removed. A trailer can transport 80 containers so this could fit on one trailer.

⁷30% added to tank farm capacity to account for flush to remove PCBs. 3 flushes of 10% by volume assumed.

⁸Assumed tanks would consist of 10,000 lbs. of metal scrap. Also assumed that scrap from pipe, pumps and strainers would equal the amount of the tank (10,000 lbs.) so the amount was doubled. Scrap metal will be disposed of by roll-off (12 tons per roll off) at Clean Harbors Grassy Mountain.

⁹Bulk liquids from the tank farm would be transported via rail to Clean Harbors Deer Park for Disposal. It is assumed that a rail car capacity would be 20,000 gallons.

¹⁰Aqueous Waste Tank capacity is 114,755 gallons and High BTU Waste is 346,749 gallons. 30% added to account for flush amounts.

¹¹Every calculation is rounded up to its nearest whole value.

Bulk Solids

Activity	Summary Totals
Removal of Waste	\$ 7,741
¹ Decontamination	\$ 123,519
¹ Transportation and Disposal of Decon Fluid	\$ 80,882
Sampling and Analysis	\$ 33,825
Transportation of Waste in Storage	\$ 206,283
Treatment and Disposal	\$ 1,043,000

Entered in values

Bulk Solids Tanks	Activity															
	Removal of Waste				^{3,4} Sampling and Analysis						^{5,6} Transportation of Waste in Storage				Treatment and Disposal	
	² Capacity	Mandays to Remove	Cost of Manpower	Equipment Cost	PCB Samples Required ¹	Cost	Rinse Samples Required	Cost	Concrete Samples required	Cost	Amount (Tons)	Number of Roll-Offs	Number of Flat Cars	Cost	Amount of Waste (Tons)	Cost
Bulk Solids Tanks	229,000	20	\$ 5,920	\$ 1,821	65	\$ 5,135	7	\$ 3,857	100	\$ 22,300	1490	125	21	\$ 206,283	1,490	\$ 1,043,000
Subtotal	229000	20	\$ 5,920	\$ 1,821	65	\$ 5,135	8	\$ 3,857	100	\$ 22,300	1490	125	21	\$ 206,283	1,490	\$ 1,043,000
5% Contingency for Sampling					69	\$ 5,451	9	\$ 4,959	105	\$ 23,415						

Notes

¹See Decon Summary and Transportation and Disposal of Decon Fluid Tables for information on how these values were calculated.

²Volumes of waste in inventory based on permitted bulk tank capacity of 229,000 gallons.

³PCB wipes will only be used to determine PCB decontamination and rinse water samples to verify RCRA decontamination. Added a 5% contingency to sample amounts to account for cost of potential samples at other areas of the facility or resampling.

⁴15 PCB samples per tank (4 tanks) and 5 PCB samples from containment/vault, 1 rinse sample per tank and 3 rinse samples from the containment/vault, and 20 concrete samples per wall and concrete 20 samples from various floor surfaces.

⁵Waste from bulk solids tanks will be transferred to roll-offs which will then be transported to Clean Harbors Deer Park by rail flat car for disposal.

⁶Waste removed from the tanks would be placed in roll-offs (12 tons each) which would be shipped by flat car (6 roll-offs per flat car). Assumed it is being destroyed at the Clean Harbors Deer Park facility.

⁷Every calculation is rounded up to its nearest whole value.

Sludge Tanks

Activity	Summary Totals
Removal of Waste	\$ 11,113
¹ Decontamination	\$ 63,218
¹ Transportation and Disposal of Decon Fluid	\$ 42,063
Sampling and Analysis	\$ 5,283
Transportation of Waste in Storage	\$ 14,820
Treatment and Disposal	\$ 225,900

Entered in values

Sludge Tanks Area	Activity												
	Removal of Waste				^{3,4} Sampling and Analysis				⁵ Transportation of Waste in Storage			Treatment and Disposal	
	² Capacity	Mandays to Remove	Cost of Manpower	Equipment Cost	PCB Samples Required	Cost	Rinse Samples Required	Cost	Amount (Gallons)	Number or Rail Cars for Bulk Sludge Waste	Cost	⁶ Amount of Waste (Tons)	Cost
Sludge Tanks	38570	30	\$ 8,880	\$ 2,233	30	\$ 2,370	4	\$ 2,204	38570	2	\$ 14,820	251	\$ 225,900
Subtotal	38570	30	\$ 8,880	\$ 2,233	30	\$ 2,370	4	\$ 2,204	38570	2	\$ 14,820	251	\$ 225,900
5% Contingency for Sampling					32	\$ 2,528	5	\$ 2,755					

Notes

¹See Decon Summary and Transportation and Disposal of Decon Fluid Tables for information on how those values were calculated.

²Volumes of waste in inventory based on permitted sludge tank system capacity of 38,570 gallons.

³PCB wipes will only be used to determine PCB decontamination and rinse water samples to verify RCRA decontamination. Added a 5% contingency to sample amounts to account for cost of potential samples at other areas of the facility or resampling.

⁴PCB Samples: 5 on tanks, 20 on containment vault, 5 on ancillary equipment. Rinse Samples: 2 from tank system and 2 from vault area

⁵Sludge from the sludge tanks would be transported via rail to Clean Harbors Deer Park for disposal. It is assumed that a rail car capacity would be 20,000 gallons.

⁶Used bulk solids density to be conservative.

⁷Every calculation is rounded up to its nearest whole value.

Kiln

Activity	Summary Totals
Removal of Waste	\$ 140,351
² Decontamination	\$ 529,086
¹ Transportation and Disposal of Decon Fluid	\$ 228,928
Sampling and Analysis	\$ 232,563
Transportation of Waste in Storage	\$ 198,059
Treatment and Disposal	\$ 463,800

Entered in values

Type of Material	Activity								
	Removal of Waste				Transportation of Waste in Storage			Treatment and Disposal	
	Amount of Waste (gallons and tons)	Mandays to Remove	Cost of Manpower	Equipment Cost	Number of Rail Cars or Roll Offs	Number of Flat Cars	Cost	Amount of Waste (Tons)	Cost
² Scrubber Liquid	56,000	30	\$ 8,880	\$ 1,904	3	-	\$ 22,230	234	\$ 117,000
¹ Slag	2,016				168	0	\$ 118,676	2,016	\$ 241,920
² Bricks	324				27	0	\$ 19,073	324	\$ 38,880
² Baghouse and spray drier	108	302	\$ 89,392	\$ 40,175	9	0	\$ 6,358	108	\$ 12,960
¹ Shred Tower Clean Out	12				1	1	\$ 9,823	12	\$ 8,400
Ash	372				31	0	\$ 21,899	372	\$ 44,640
Subtotal	-	332	\$ 98,272	\$ 42,079	239	1	\$ 198,059	3,066	\$ 463,800

Kiln area	Activity					
	² Sampling and Analysis					
	PCB Samples Required	Cost	Rinse Samples Required	Cost	Non-aqueous Samples (Concrete Cores and Brick Samples)	Cost
Kiln and Afterburner feed skips, slag discharge, "A" Damper	4	\$ 316	8	\$ 4,408	0	\$ -
8 Kiln Area Units	208	\$ 16,432	16	\$ 8,816	0	\$ -
6 Kiln Area Containments	126	\$ 9,954	13	\$ 7,163	0	\$ -
Random Structural Wipes in Kiln Area	41	\$ 3,239	0	\$ -	0	\$ -
Random Structural Wipes in Shred Tower Area	134	\$ 10,586	0	\$ -	0	\$ -
Two Komar Shredders	7	\$ 553	4	\$ 2,204	0	\$ -
Shred Tower Airlock	3	\$ 237	2	\$ 1,102	0	\$ -
Shred Tower Feed Augur	7	\$ 553	2	\$ 1,102	0	\$ -
Bricks from kiln and "A" Damper	0	\$ -	0	\$ -	200	\$ 44,600
Bricks from SCC	0	\$ -	0	\$ -	150	\$ 33,450
Deolaggar	19	\$ 1,501	2	\$ 1,102	20	\$ 4,460
5 Pant Leg Sections	74	\$ 5,846	10	\$ 5,510	100	\$ 22,300
Spray Dryer	45	\$ 3,555	2	\$ 1,102	80	\$ 17,840
Accumulation Areas	0	\$ -	0	\$ -	20	\$ 4,460
Parking Lot	0	\$ -	0	\$ -	20	\$ 4,460
Kiln Area	0	\$ -	0	\$ -	10	\$ 2,230
Shred Tower Area	0	\$ -	0	\$ -	10	\$ 2,230
Subtotal	668	\$ 52,772	59	\$ 32,509	610	\$ 136,030
5% Contingency for Sampling	702	\$ 55,458	62	\$ 34,162	641	\$ 142,943

Notes:

¹See Decon Summary and Transportation and Disposal of Decon Fluid Tables for information on how those values were calculated.

²Scrubber has 4 tanks at 14,000 gallons each. Amount is in gallons. This will be transported by rail to Clean Harbors Dear Park for Disposal. Considered it to be bulk aqueous waste.

³Non-liquid wastes excluding shred tower: 168 boxes of slag 20 yd³ each, 27 boxes of brick 20 yd³ each, 31 boxes of ash at 20 yd³ each, and 9 boxes of baghouse/spray dryer cleanout at 20 yd³ each. These will be disposed of at Clean Harbors Grassy Mountain.

⁴1 box from shred tower cleanout 20 yd³. This will be transported by rail and be disposed of at Clean Harbors Dear Park.

⁵PCB wipes will only be used to determine PCB decontamination and rinse water samples to verify RCRA decontamination. Added a 5% contingency to sample amounts to account for cost of potential samples at other areas of the facility or resampling.

⁶Every calculation is rounded up to its nearest whole value.