WATER RECOVERY, LLC

**1819 Albert Street** Jacksonville, Florida 32202

> **USED OIL FACILITY CLOSURE PLAN**

## **MANAGEMENT PROCEDURE 4800**

# **REVISION: 3**

## Attachment MP 4800

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6/9/20

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#### 1.0 WRI USED OIL FACILITY CLOSURE PLAN

This used oil closure plan will be used throughout the facility life to help ensure the facility may be clean closed at the end of its useful life. Used oil accepted by the facility must be properly classified, profiled and approved according to Water Recovery, LLC (WRI) Management Procedures 4100. WRI procedures require used oil to be handled, transported, labeled, marked, treated and disposed of in accordance with current federal, state and local regulations. A complete waste inventory will be maintained throughout the facility life. Waste profile records with supporting analytical data or material safety data sheets, if necessary, will be maintained as well.

The analytical methods that are listed in this plan are intended to be updated with the equivalent methods at the time of closure. The sampling and analytical methods that are used at the facility closure will be in accordance with the most current version of SW 846 (or equivalent) and the intent of this closure plan. Changes in the SW 846 analytical methods are anticipated and will not require this closure plan to be revised prior to implementation.

The used oil closure work under this permit will be completed by the facility operator, WRI independently of the closure activities to be accomplished by the facility owner that are required as a result of previous operations.

#### 2.0 FACILITY DESCRIPTION

The WRI Used Oil Facility layout is depicted in the area shown on Figure 1. Secondary containment areas are constructed of concrete that sealed with an epoxy coating to prevent contaminates from entering the pores and causing extensive closure efforts.

Used oil transfer operations occur only within the Sumped Work Area identified on Figure 1. Used oil tanks that show visual signs of leakage will have the contents transferred to another tank. Leaks will be repaired before the tank is placed back into service. Surfaces that come in contact with the used oil will be completely decontaminated. Daily cleanup will be verified by visual observation on secondary containment surfaces.

#### 3.0 CLOSURE PERFORMANCE STANDARD

The WRI Used Oil Processing Facility will be closed in a manner which will eliminate, control or at least minimize, to the extent necessary to prevent threats to human health the environment, escape of used oil, contaminated rainfall or waste decomposition products to the atmosphere, groundwater, surface water and the surrounding lands. Additionally, closure activities will be conducted in a manner that will eliminate or minimize the need for post-closure maintenance.

The WRI Used Oil Facility will remain in operation until the end of its economic life. The facility is planned for clean closure at the end of its useful life. The facility will be operated with the management motto "DO NOT SPILL SO MUCH AS ONE DROP." The used oil received by the facility will be in structurally sound shipping containers without any residue on the container exterior. Best available management practices will be used to minimize future closure activities.

Revision 4 February 2020

## 4.0 SCHEDULE FOR CLOSURE EVENTS

There are no plans to close the WRI Used Oil Facility at any time in the known future. Should a date for closure be anticipated any time in the future, this plan will be amended.

Revision 4 February 2020

D-365 days

D-330 days

D-300 days

D-180 days

waste)

D-90 days

analysis)

D-30 days

D-15 days

inspection)

D-10 days

D-10 days

D-day

D-day

D-150-180 days (within 30

days of last receipt of

D-90 days (after waste inventory removal)

D-90 days (after chemical

D-15 days (after area

#### 5.0 TIME ALLOWED FOR CLOSURE [9(a)]

The day closure activities are completed is "D" Day.

A. Process Environmental Assessment

Complete preparation Facility EPC approval (EPC – Environmental Protection Committee) WRI President approval

- B. Notify FDEP of proposed closure D-270 days
- C. Last receipt of waste
- D. Begin closure activities
- E. Complete waste inventory removal
- F. Request for Chemical Analysis
- G. Start area cleanup
- H Complete area cleanup
- I. Complete area inspection
- J. Request for Compliance Analysis
- K. Closure facility
- L. Certify closure to FDEP
- M. Transmit facility records including closure correspondence and reports to Staff Environmental Coordinator.
- N. Report closure to Real Estate and Cost Accounting.

#### 6.0 EXTENSIONS FOR CLOSURE TIME

Provisions have been amended to extend the closure period, depending upon the circumstances, by the Florida Department of Environmental Protection (FDEP). Should extenuating circumstances prevail or a requirement for amending the closure plan be realized, FDEP will be petitioned by the owner or operator for special consideration under these provisions.

A request for closure extension is not anticipated at the present time.

#### 7.0 PARTIAL CLOSURE AND FINAL CLOSURE ACTIVITIES

The WRI Used Oil Facility will support the military, marine and commercial sectors. Considering business planning, there is no indication that this facility will be closed in the known future. Current business planning shows activities that extend until the Year 2099. Should this facility require closure, the following actions will be taken to ensure the storage area has been closed in accordance with the FDEP regulations.

#### 7.1 Closure Activities

When the decision to close this facility has been finalized, the following actions will be taken:

#### 7.1.1 Notification

A closure notification letter will be sent to FDEP at least 270 days prior to the beginning of closure activities by the operator.

#### 7.1.2 Preclude Receipt of Materials

Stop delivery and receipt of used oils at the facility. Divert any additional wastes to another permitted facility.

#### 7.1.3 Research

WRI compliance personnel will conduct a record search and on-site inspection to determine:

- 1. Maximum inventory of wastes in the storage facility
- 2. If any accidental releases had occurred
- 3. If any waste residues exist
- 4. The need for decontamination and/or area cleaning
- 5. Oldest accumulated waste on-site; and
- 6. Dates for completion of various closure activities utilizing Section 5.0 Time Allowed for Closure, of this plan.

#### 7.1.4 Maximum Waste Inventory

The maximum waste inventory that can be in storage at any time is limited to the volume of aboveground storage tanks, drums and roll off boxes.

#### 7.1.5 Inspection

The facility operator will arrange for site inspections to be conducted by a registered Professional Engineer (PE) to verify that the facility is being and has been closed in accordance

with the closure plan, and FDEP requirements. The PE shall inspect the facility several times during the closure to assure that closure activities are in compliance with the approved closure plan. The PE will provide written certification to FDEP and WRI that the closure requirements of this plan have been met. The certification shall bear the PE's signature, date of certification and stamp.

#### 7.1.6 Inventory Disposal, Removal or Decontamination of Equipment [9(b)]

The criterion for determining the need for decontamination will be based on visual or physical and chemical analysis of the item, including the equipment and the surrounding soils. Items that are visually contaminated will be decontaminated without the need for any prior physical or chemical analysis. Facility equipment includes the gauging rod, mixer, heater and the facility pump. The tank contents and residuals are to be removed and disposed of in accordance with Section 7.1.10. The tanks and piping will be recycled as scrap metal after being decontaminated. Concrete will be decontaminated and sent to permitted solid waste landfill. Contaminated soil, if present, will be removed and treated at a permitted facility or will be placed into a permitted landfill. The tanks, piping, equipment and items that will be cleaned or closed are listed in Table 1. The tanks and associated piping are plumbed to the main pump. There are cross connections between the pipes. Each tank and the associated piping will be rinsed at least one time for decontamination.

Item Number	Description	Final Action
1	Tank 1P	Decontaminate and Recycle
2	Tank 2P	Decontaminate and Recycle
3	Tank 3P	Decontaminate and Recycle
4	Tank 4P	Decontaminate and Recycle
5	Tank 5P	Decontaminate and Recycle
6	Tank 6P	Decontaminate and Recycle
7	Tank 7P	Decontaminate and Recycle
8	Tank 8P	Decontaminate and Recycle
9	Tank 9P	Decontaminate and Recycle
10	Tank 10P	Decontaminate and Recycle

#### Table 1 Closure Action Items

Item Number	Description	Final Action
11	Tank 11P	Decontaminate and Recycle
12	Tank 1SW	Decontaminate and Recycle
13	Piping	Decontaminate and Recycle
14	Concrete	Decontaminate and Recycle
15	Manual Gauge	Decontaminate and Recycle
16	Mixer	Decontaminate and Recycle
17	Heater	Decontaminate and Recycle
18	Facility Pump	Decontaminate and Recycle
19	Containers	Decontaminate and Recycle
20	Soil	Treatment/Landfill
21	Groundwater	Treatment

Containers will be emptied, decontaminated and disposed of as solid waste for closure.

#### 7.1.7 Decontamination procedures [9(c)]

The items that are contaminated at closure will be cleaned using a commercial detergent solution mixed in accordance with the manufactures' instructions. The items will also be cleaned with a high-pressure water spray that may be elevated to a suitable cleaning temperature.

#### 7.1.7.1 Tanks and Piping

The tank contents and residuals are to be removed and disposed of in accordance with Section 7.1.10. The tanks and associated piping are plumbed to the main pump. There are cross connections between the pipes. The tank interior and external surfaces will be decontaminated using a high-pressure water spray with an industrial cleaner elevated to a suitable temperature. The cross connections in the piping will be severed and cleaned into the main line. The severed connection will be plugged or capped until the entire pipe section is decontaminated. The piping will be pigged and cleaned using a hydroblaster. WRI will decontaminate used oil residues in the tanks and associated piping. The tanks and piping will be cleaned of all sludge, product, vapors and all visual signs of contamination. All wastes from the tanks and from the tank cleaning process will be properly characterized and disposed.

The rinse and cleaning water will be stored in a portable 20,000-gallon frac tank. The cleaning water will be consolidated from all the cleaning operations for sampling, waste classification and disposal. The cleaning and rinse water will be analyzed for the Section 7.1.9 parameters.

A clearance rinse water sample will be obtained from each tank. The tank clearance samples will be analyzed for the Section 7.1.9 parameters to demonstrate clean closure.

#### 7.1.7.2 Containers

The container contents and residuals are to be removed and disposed of in accordance with Section 7.1.10. Used oil is not currently stored in containers at the facility. Used oil may be brought into the facility in containers for small quantity generators in the future. Containers will be emptied, decontaminated and disposed of as solid waste or recycled for closure. Used oil containers will be stored in secondary containment.

The interior and external surfaces of each container will be decontaminated in a temporary sumped decontamination unit lined with two layers of six-mil polyethylene sheeting using a high-pressure water spray and industrial cleaner at a suitable temperature. Empty containers at the

facility at closure will be decontaminated as well. The containers will be emptied of material, including fluids and sludge and cleaned. The containers will be cleaned to the degree to where they meet the empty container standards under Title 40 Code of Federal Regulations (CFR) Part 261.7 and then recycled as scrap metal.

The rinse and cleaning water will be stored in a portable 20,000-gallon frac tank. The cleaning water will be consolidated from all the cleaning operations for sampling, waste classification and disposal. The cleaning and rinse water will be analyzed for the Section 7.1.9 parameters.

#### 7.1.7.3 Equipment

The facility pump and external surfaces and the manual gauge, mixer and heater exterior surfaces will be decontaminated using a high-pressure water spray with an industrial cleaner elevated to a suitable temperature. The gauge will be disposed of after the first cleaning since it is made of wood that is soaked with oil. The mixer will have the exterior surface decontaminated and will be sold as a product or recycled as scrap metal. The natural gas heater will have the heat exchanger coils decontaminated and will be sold as a product. The heat transfer oil will be drained from the unit into shipping containers. The heat transfer coils will be plugged and sold with the unit. The heat transfer oil will also be sold with the unit. The heater will be sold as scrap if it cannot be sold as a product. The interior of the coils will be decontaminated if the heater is to be sold as scrap metal. The heat transfer oil will be managed as used oil if the heater is scrapped. WRI will decontaminate used oil residues in the equipment. The equipment will be cleaned of all sludge, product, vapors and all visual signs of contamination. All wastes from the equipment and from the equipment cleaning process will be properly characterized and disposed.

The rinse and cleaning water will be stored in a portable 20,000-gallon frac tank. The cleaning water will be consolidated from all the cleaning operations for sampling, waste classification and disposal. The cleaning and rinse water will be analyzed for the Section 7.1.9 parameters.

#### 7.1.7.4 Process Areas

The process areas' surfaces will be decontaminated using a high-pressure water spray with an industrial cleaner at a suitable temperature. The concrete may be left in place or will be disposed of if it is to be removed. WRI will decontaminate used oil residues in the sump, transfer area, and containment areas. The process areas will be cleaned of all sludge, product,

vapors and all visual signs of contamination. All wastes from these areas and from the cleaning of these areas will be properly characterized and disposed.

The rinse and cleaning water will be stored in a portable 20,000-gallon frac tank. The cleaning water will be consolidated from all the cleaning operations for sampling, waste classification and disposal. The cleaning and rinse water will be analyzed for the Section 7.1.9 parameters.

#### 7.1.8 Sampling and Analysis Methods [9(d)]

The methods used for closure sampling and analysis will be consistent with the requirements in Chapter 62-160 of the Florida Administrative Code (FAC). Procedures and analyses listed in the below four references will be used as long as the method is equivalent to that listed in EPA Methods SW-846. The method selected for analysis of closure samples will have the lowest method reporting level possible.

- A. US-EPA, Region IV, Environmental Services Division, <u>Environmental</u> <u>Compliance Branch Standard Operating Procedures and Quality Assurance</u> <u>Manual</u>, February 1, 1991, (ECBSOPQAM).
- B. FDEP, Quality Assurance Section, <u>Standard Operating Procedures for</u> <u>Laboratory Operations and Sample Collection Activities</u>. DER QA-001/92, September 30, 1992.
- C. US-EPA, Research and Development, <u>Samplers and Sampling Procedures for</u> <u>Hazardous Waste Streams</u>, January 1980, EPA-600/2-80-018.
- D. US-EPA, Office of Solid Waste, <u>Waste Analysis Plans A Guidance Manual</u>, October 1984, EPA/630-SW-84-012.

Rinse water, soil, oil and groundwater samples will be analyzed for the following parameters and by the method indicated as shown in Table 2.

#### Table 2 Analysis Parameters and Methods

Description	EPA Method
RCRA Metals	6010/7470
Total Recoverable Petroleum Hydrocarbons	8015/FL-PRO
Volatile Aromatics	8021
Phenols	8041
Purgeable Organics	8260
Base Neutrals/Acid Extractables	8270
Total Organic Halogens	9020

#### 7.1.9 Waste Removal

The WRI Plant Manager will arrange with an approved company to transport and dispose of any wastes at an off-site location. The WRI Plant Manager will maintain appropriate logs, manifests and records.

Waste classifications will be made in accordance with Chapter 62-730 FAC and 40 CFR Part 262. Hazardous waste will not be disposed of on-site. The hazardous waste will be shipped off-site to a permitted treatment, storage and disposal facility by a licensed hazardous waste transporter. Hazardous waste shipments will be completed with proper haulers who are licensed as a hazardous waste transporter. The waste containers will have the required labels and markers. The WRI facility will not accept hazardous waste. The generation of hazardous waste during closure activities is not anticipated since the facility will only manage nonhazardous waste used oil during operation.

The used oil tanks and associated capacities that will be closed are listed in Table 3.

Tank Number	Capacity (gallons)	Contents
1P	23,232	Used Oil
2P	23,232	Used Oil
3P	23,232	Used Oil
4P	21,445	Used Oil
5P	20,778	Used Oil
6P	25,806	Used Oil
7P	21,446	Used Oil
8P	21,446	Used Oil
9P	20,833	Used Oil
10P	10,000	Used Oil
11P	500	Used Oil
SW1	30,000	Stormwater

#### Table 3 WRI Used Oil Tank Capacity

There will be no need for further facility maintenance because the used oil will have been removed from the facility at the completion of the closure process. The facility is operated under

a policy of not spilling so much as one drop of used oil on the ground to prevent soil and groundwater contamination from occurring.

#### 7.1.9.1 Solid Waste [9(e)]

Contaminated soils, concrete, sludges and decontaminated containers and equipment will be removed and placed into Department of Transportation (DOT) open top containers, roll off boxes or dump trailers for disposal off-site. The contaminated soil will be replaced by clean soil obtained from an acceptable source.

#### 7.1.10.2 Liquid Waste [9(f)]

Used oil, water and sludges will be removed and placed into DOT open top containers, frac tanks or tanker trucks for disposal off-site.

#### 7.1.10 Soil Sampling [9(g)]

Surface soils will be sampled at ten locations as shown in Figure 2. Samples will be obtained from two vertical points at each sampling location for a total of twenty samples. The samples at each location will be obtained from 0-6 inches and 6-24 inches below the land surface. The soil samples will be obtained in accordance with EPA SW 846 Methods. The soil samples will be analyzed for the following parameters using the EPA method indicated:

Description	EPA Method
RCRA Metals	6010/7470
Total Recoverable Petroleum Hydrocarbons	8015/FL-PRO
Description	EPA Method
Volatile Aromatics	8021
Phenols	8041
Purgeable Organics	8260
Base Neutrals/Acid Extractables	8270
Total Organic Halogens	9020

The analytical parameters may be modified to include only constituents stored by the Used Oil Facility by amendment procedures. The analytical parameter list may also be modified to reflect changes in state or federal regulations.

If analytical results from soil sampling indicate presence of impacted soil, additional soil samples may be collected to define the extent of impacted soils for remediation purposes. The additional soil samples will be analyzed for those parameters previously found on the site.

#### 7.1.11 Groundwater Sampling [9(g)(i)]

Groundwater will be sampled at four locations as shown in Figure 2. Samples will be obtained from each of the three existing monitoring wells (MW-12, MW-13 and MW-14) and one new shallow monitoring well location. Groundwater samples will be obtained from each well using a peristaltic pump for low flow purging as a quiescent sampling method. The groundwater samples will be obtained in accordance with EPA SW 846 Methods. The groundwater samples will be analyzed for the following parameters using the EPA method indicated:

Description	EPA Method
RCRA Metals Total Recoverable Petroleum Hydrocarbons Volatile Aromatics Phenols Purgeable Organics Base Neutrals/Acid Extractables Total Organic Halogens	6010/7470 8015/FL-PRO 8021 8041 8260 8270 9020

The analytical parameters may be modified to include only constituents stored by the Used Oil Facility by amendment procedures. The analytical parameter list may also be modified to reflect changes in state or federal law regulations.

If analytical results from groundwater sampling indicate presence of impacted groundwater in samples from the four wells, additional groundwater samples may be collected to define the extent of petroleum hydrocarbons for remediation purposes. The additional groundwater samples will be analyzed for those parameters previously found on the site.

#### 7.1.12 Minimum Sample Quantities

The minimum number of samples to be analyzed to complete closure in accordance with this plan is forty. This number is based upon the assumption that the decontamination actions will generate less than 20,000 gallons of cleaning and rinse water. Table 4 provides a breakdown of the sampling items to be completed.

### Table 4Minimum Sample Quantities

Description	Media	Quantity
Clearance Rinse Water	Liquid	16
Groundwater	Liquid	4
Soil	Solid	20
	Total	40

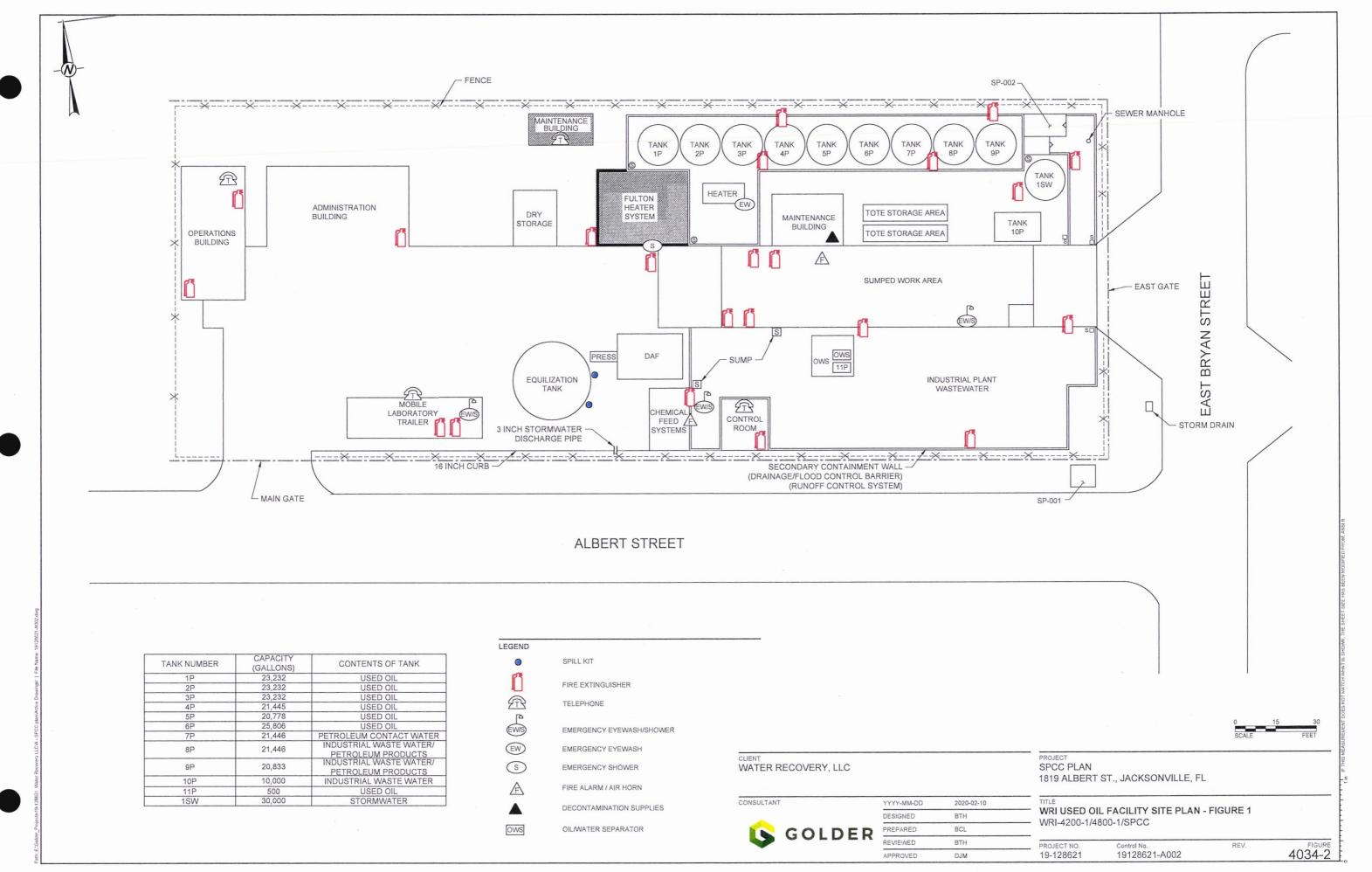
### 7.1.13 Post-Closure Monitoring [9(g)(ii)]

The WRI Used Oil Facility is not expected to require monitoring after closure. Any condition that might have presented a potential contamination to surface or groundwaters or a hazard to safety of personnel would have been contained, removed, returned to normal and reported at the time of the incident. However, it is a duty of the post-closure inspector to specifically review the potential for possible future environmental hazards. The inspection report must specifically address the need for monitoring and either identify "none required," or specify the type and extent of post-closure monitoring required. If a monitoring requirement is identified, it will be formalized in report form.

If soil or groundwater contamination is detected above current FDEP concentrations regulated under Chapter 62-777 FAC the soil or groundwater will be remediated in accordance with the requirements under Chapter 62-710 FAC and Chapter 62-780 FAC. If groundwater is contaminated, the closure and post-closure requirements under 40 CFR Part 264.310 will be followed.

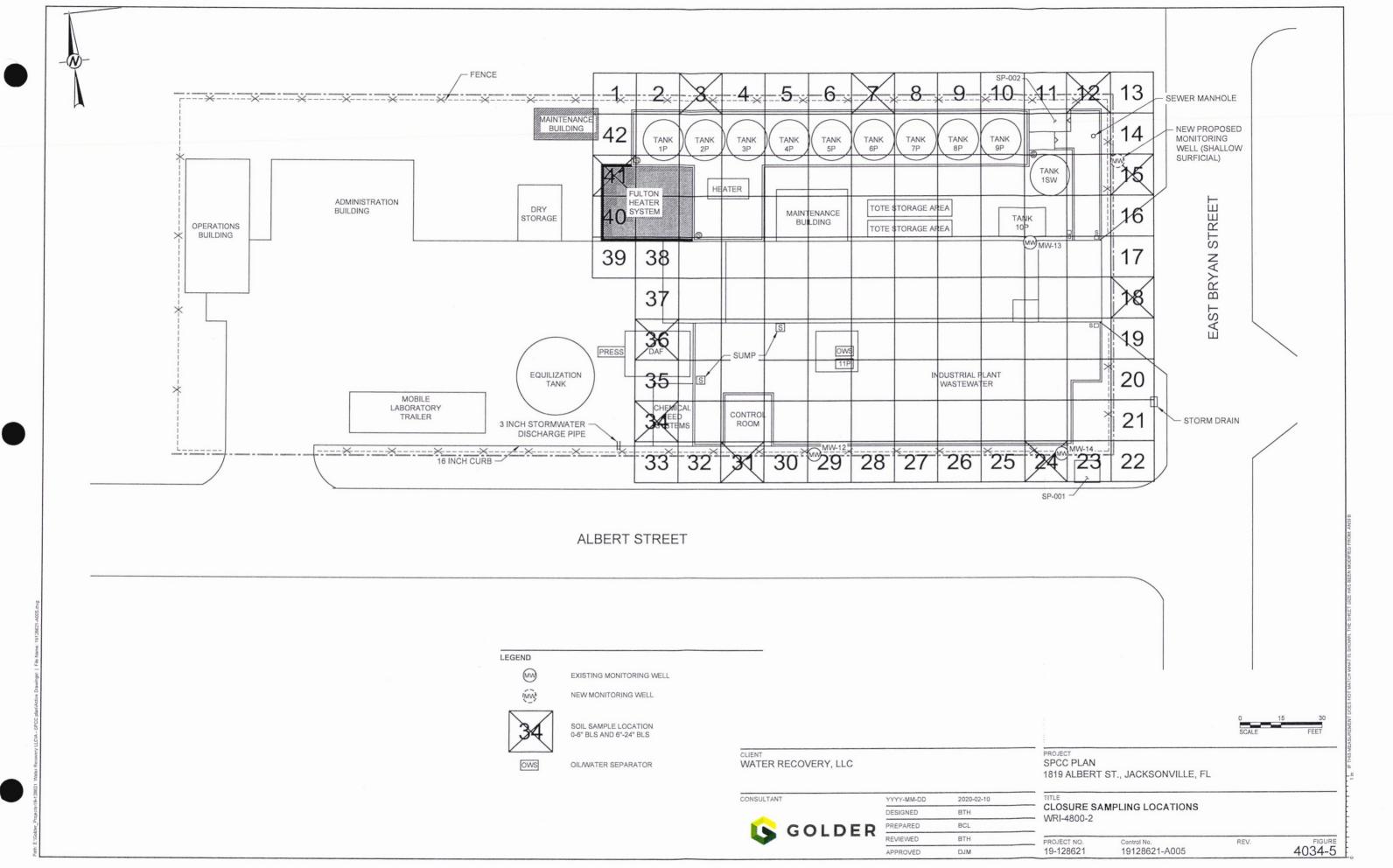
### 7.2 FDEP Aboveground Storage Tank Systems Closure Requirements

The WRI Used Oil Facility aboveground storage tank system will be closed in accordance with Chapter 62-762.801 FAC. The current equivalent of this regulation will be implemented at the time of closure.



TANK NUMBER	CAPACITY	CONTENTS OF TANK	
TAINK NUMBER	(GALLONS)	CONTENTS OF TANK	
1P	23,232	USED OIL	
2P	23,232	USED OIL	
3P	23,232	USED OIL	
4P	21,445	USED OIL	
5P	20,778	USED OIL	
6P	25,806	USED OIL	
7P	21,446	PETROLEUM CONTACT WATER	
8P	21,446	INDUSTRIAL WASTE WATER/	
OF	21,440	PETROLEUM PRODUCTS	
9P	20,833	INDUSTRIAL WASTE WATER/	
96	20,833	PETROLEUM PRODUCTS	
10P	10,000	INDUSTRIAL WASTE WATER	
11P	500	USED OIL	
1SW	30,000	STORMWATER	

EGEND				
0	SPILL KIT			
ľ	FIRE EXTINGUISHER			
R	TELEPHONE			
م				
EWIS	EMERGENCY EYEWASH/SHOWER			
EW	EMERGENCY EYEWASH			
S	EMERGENCY SHOWER	WATER RECOVERY, LLC		
A	FIRE ALARM / AIR HORN			-
	DECONTAMINATION SUPPLIES	CONSULTANT	YYYY-MM-DD	2020-02-10
			DESIGNED	BTH
OWS	OIL/WATER SEPARATOR	底 GOLDER	PREPARED	BCL
		SOLDER	REVIEWED	BTH
			100001150	DIN



LEGEND				
MW	EXISTING MONITORING WELL			
MW	NEW MONITORING WELL			
34	SOIL SAMPLE LOCATION 0-6" BLS AND 6"-24" BLS			
ows	OILWATER SEPARATOR	CLIENT WATER RECOVERY, LLC		
		CONSULTANT	YYYY-MM-DD	2020-02-10
			DESIGNED	BTH
		底 GOLDER	PREPARED	BCL
			DEVIEWED	DTU