Hertz Rent-a-Car (09255)

Date: 1/23/2023

New Jersey Department of Environmental Protection
Reason for Application

Permit Being Modified

Permit Class: **Number:** 0

Description of Modifications: The airport is moving all of the rental car facilities to a new consolidated car rental facility scheduled to begin operation in 2023. It is possible Hertz will remain onsite for another year or two to conduct vehicle maintenance.

Hertz has installed a very small pump and treat system (operating at less than 1 GPM liquid) to gain hydraulic control at the Site. The equalization tank (50 gallon tank) is vented to the outside. Air generated from the process of pulling water from the water wells, and from the tank during filling, is pushed out of the equalization tank at a low volume. However, the vent is being fitted with two 55-gallon air carbon drums to treat the vapors. Due to the concentrations of the groundwater and very low levels of light non-aqueous phase liquid, an air permit is required even though our air emissions are not reportable with the treatment. Due to the carbon treatment, only de minimis quantities of VOCs and HAPs are anticipated to be released.

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): Hertz Rent-a-Car

Facility ID (AIMS): 09255

Street Address: HERTZ AT NEWARK INTERNATIONAL
AIRPORT
BLDG 23
NEWARK, NJ 07114

Mailing Address: HERTZ AT NEWARK INTERNATIONAL
AIRPORT
BLDG 23
NEWARK, NJ 07114

State Plane Coordinates:

X-Coordinate: 579,082

Y-Coordinate: 676,871

Units: Feet

Datum:

Source Org.: DEP-GIS

Source Type: Digital Image

County: Essex

Location Description:

Industry:

Primary SIC:

Secondary SIC:

NAICS:

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Air Permit Information Contact

Organization: EnviroTrac Ltd.
Org. Type: Corporation
Name: Robert Hoffmann
NJ EIN: 11318093300
Title: Senior Project Manager
Phone: (609) 387-5553 x
Mailing Address: 6 Terri Lane, Suite 350 Burlington, NJ 08016
Fax: ( ) - x
Other: (609) 456-1636 x
Type: Mobile
Email: roberth@envirotrac.com

Contact Type: Consultant

Organization: EnviroTrac Ltd.
Org. Type: Corporation
Name: Robert Hoffmann
NJ EIN: 11318093300
Title: Senior Project Manager
Phone: (609) 387-5553 x
Mailing Address: 6 Terri Lane, Suite 350 Burlington, NJ 08016
Fax: ( ) - x
Other: (609) 456-1636 x
Type: Mobile
Email: roberth@envirotrac.com

Contact Type: Fees/Billing Contact

Organization: EnviroTrac Ltd.
Org. Type: Corporation
Name: Robert Hoffmann
NJ EIN: 11318093300
Title: Senior Project Manager
Phone: (609) 387-5553 x
Mailing Address: 6 Terri Lane, Suite 350 Burlington, NJ 08016
Fax: ( ) - x
Other: (609) 456-1636 x
Type: Mobile
Email: roberth@envirotrac.com

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: **Responsible Official**

Organization: Hertz Corp.

Name: Gordon Walters

Title: Sr. Program Manager- Environmental

Phone: (239) 301-7248 x

Fax: ( ) - x

Other: ( ) - x

Type:

Email: GL.Walters@hertz.com

Org. Type: Corporation

NJ EIN: 13193856800

Mailing Address: 8501 Williams Road
Estero, FL 33928

Hertz Rent-a-Car (09255) Date: 1/23/2023

New Jersey Department of Environmental Protection
Facility Profile (Permitting)

1. Is this facility classified as a small business by the USEPA?	No
2. Is this facility subject to N.J.A.C. 7:27-22?	No
3. Are you voluntarily subjecting this facility to the requirements of Subchapter 22?	No
4. Has a copy of this application been sent to the USEPA?	No
5. If not, has the EPA waived the requirement?	
6. Are you claiming any portion of this application to be confidential?	No
7. Is the facility an existing major facility?	No
8. Have you submitted a netting analysis?	No
9. Are emissions of any pollutant above the SOTA threshold?	No
10. Have you submitted a SOTA analysis?	No
11. If you answered "Yes" to Question 9 and "No" to Question 10, explain why a SOTA analysis was not required	
12. Have you provided, or are you planning to provide air contaminant modeling?	No

Hertz Rent-a-Car (09255) Date: 01/23/2023

New Jersey Department of Environmental Protection
Non-Source Fugitive Emissions

FG NJID	Description of Activity Causing Emission	Location Description	Reasonable Estimate of Emissions (tpy)								
			VOC (Total)	NOx	CO	SO	TSP (Total)	PM-10	Pb	HAPS (Total)	Other (Total)
FG1	Occasional opening of equalization tank	In Equipment room									
Total											

Hertz Rent-a-Car (09255)

Date:1/23/2023

New Jersey Department of Environmental Protection
Insignificant Source Emissions

IS NJID	Source/Group Description	Equipment Type	Location Description	Estimate of Emissions (tpy)								
				VOC (Total)	NOx	CO	SO	TSP	PM-10	Pb	HAPS (Total)	Other (Total)
IS1				18.000							0.37000000	
Total												

Hertz Rent-a-Car (09255) Date: 1/23/2023

New Jersey Department of Environmental Protection
Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand-Fathered	Last Mod. (Since 1968)	Equip. Set ID
E1	Equal. Tank	pump / equalization tank	Other Equipment		10/27/2022	No		

Hertz Rent-a-Car (09255) Date: 1/23/2023

New Jersey Department of Environmental Protection
Control Device Inventory

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand-Fathered	Last Mod. (Since 1968)	CD Set ID
CD1	Carbon Drum1	150 lb air carbon drum	Adsorber	1/30/2023	No		
CD2	Carbon Drum2	150 lb air carbon drum	Adsorber	1/30/2023	No		

Hertz Rent-a-Car (09255)

Date: 1/23/2023

New Jersey Department of Environmental Protection
Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam. (in.)	Height (ft.)	Dist. to Prop. Line (ft)	Exhaust Temp. (deg. F)			Exhaust Vol. (acfm)			Discharge Direction	PT Set ID
							Avg.	Min.	Max.	Avg.	Min.	Max.		
PT1	drum dischar	eq. tank vent discharge after two carbon drums in series			4	22	70.0	10.0	100.0	0.3	0.0	2.0	Horizontal	

Hertz Rent-a-Car (09255)

Date: 1/23/2023

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

BP1

Batch Process Operating Scenario Run Time (hours) *Min. Calc. Time:* *Max. Calc. Time:* *Min. User Time:* *Max. User Time:*

Step NJID	Facility's Designation	Step Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Step Run Time Hours Min.	Step Run Time Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.

U 1 Eq Tank Vent for Equalization Tank. Air treated with carbon drums.

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	venting	While system is operating, excess air from pumps and water rise in tanks will escape the vent of the eq. tank through the carbon drums in series	Normal - Steady State	E1	CD1 (P) CD2 (S)	PT1		0.0	8,500.0		0.0	2.0	50.0	80.0

09255 Hertz Rent-a-Car Date: 1/23/2023

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U1 Eq Tank**

Operating Scenario: **OS1**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)		0.00130130	0.00001300	0.00001300	lb/hr	No
VOC (Total)		0.03493150	0.00035000	0.00035000	lb/hr	No

000000 E1 (Other Equipment)
Print Date: 1/23/2023

Make:	
Manufacturer:	Peabody Engineering
Model:	01-31263
Equipment Type:	pump / equalization tank
Capacity:	24.00
Units:	gal/min
Description:	

Have you attached a diagram showing the location and/or the configuration of this equipment?

- (●) Yes
- ( ) No

Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?

- ( ) Yes
- (●) No

Comments: per DEP, inserted max pump capacity in capacity above

000000 CD1 (Adsorber)
Print Date: 1/23/2023

Make:	
Manufacturer:	
Model:	
Adsorber Type:	Fixed (Non-Regenerative)
Description:	
Maximum Gas Flow Rate to Adsorber (acfm):	2.0
Maximum Temperature of Vapor Stream to Adsorber (°F):	80.00
Minimum Temperature of Vapor Stream to Adsorber (°F):	50.00
Minimum Moisture Content of Vapor Stream to Adsorber (%):	3.0
Type of Adsorbant:	air carbon
Bed Height:	3.00
Bed Length:	2.00
Bed Width:	2.00
Units:	Feet
Other Bed Dimension:	
Value:	
Units:	
Minimum Pressure Drop Across Adsorbant (in. H20):	
Maximum Pressure Drop Across Adsorber (in. H20):	
Total Weight of Adsorbant (lbs):	150.0
Total Weight of Adsorbant When Saturated (lbs):	191.3
Maximum Adsorbant Capacity (lbs Adsorbate/lbs Adsorbant):	0.30
Minimum Adsorbant Capacity (lbs Adsorbate/lbs Adsorbant):	0.25
Set-up Type:	Series

Method of Determining Breakthrough (check all that apply):

Continuous Emissions Monitor (CEM):	☐
Replacement By Weight:	☐
Periodic Testing:	☑
Sampling Frequency:	monthly
Sampling Device:	Photoionization Detector
Other:	☐
Description:	
Minimum Concentration at Breakthrough (ppmvd):	50.00
Handling Method of Saturated Adsorbant:	Disposed of off-site
Method of Regeneration:	

000000 CD1 (Adsorber)
Print Date: 1/23/2023

Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	PID reading between CD1 and CD2.
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No
Comments:	

000000 CD2 (Adsorber)
Print Date: 1/23/2023

Make:	
Manufacturer:	
Model:	
Adsorber Type:	Fixed (Non-Regenerative)
Description:	
Maximum Gas Flow Rate to Adsorber (acfm):	2.0
Maximum Temperature of Vapor Stream to Adsorber (°F):	80.00
Minimum Temperature of Vapor Stream to Adsorber (°F):	20.00
Minimum Moisture Content of Vapor Stream to Adsorber (%):	3.0
Type of Adsorbant:	air carbon
Bed Height:	3.00
Bed Length:	2.00
Bed Width:	2.00
Units:	Feet
Other Bed Dimension:	
Value:	
Units:	
Minimum Pressure Drop Across Adsorbant (in. H20):	
Maximum Pressure Drop Across Adsorber (in. H20):	
Total Weight of Adsorbant (lbs):	150.0
Total Weight of Adsorbant When Saturated (lbs):	191.3
Maximum Adsorbant Capacity (lbs Adsorbate/lbs Adsorbant):	0.30
Minimum Adsorbant Capacity (lbs Adsorbate/lbs Adsorbant):	0.25
Set-up Type:	Series

Method of Determining Breakthrough (check all that apply):

Continuous Emissions Monitor (CEM):	☐
Replacement By Weight:	☐
Periodic Testing:	☑
Sampling Frequency:	monthly
Sampling Device:	Photoionization Detector
Other:	☐
Description:	
Minimum Concentration at Breakthrough (ppmvd):	50.00
Handling Method of Saturated Adsorbant:	Disposed of off-site
Method of Regeneration:	

000000 CD2 (Adsorber)
Print Date: 1/23/2023

Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	PID reading between CD1 and CD2.
Have you attached data from recent performance testing?	○ Yes ● No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	○ Yes ● No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	● Yes ○ No
Comments:	

000000 U1 (Soil Vapor Contaminant)
Print Date: 1/23/2023

If contamination is from a gasoline spill, contaminants may be listed as Benzene (a Group I TXS) and Other Petroleum Hydrocarbons.

If contaminants are NOT from a gasoline spill, list the top five (5) contaminants with their associated information.

Chemical Name	Pollutant Category	Maximum Concentration of contaminant in vapor stream extracted from soil (ppmv)	Check if this contaminant is regulated under NJAC 7:27 - 17 (TXS Group I)
Benzene	HAP (Total)	200.00	☑
Other (Total)	VOC (Total)	10000.00	☐

09255 Hertz Rent-a-Car PCP000000 U1 OS1 (Other Equipment)
Print Date: 1/23/2023

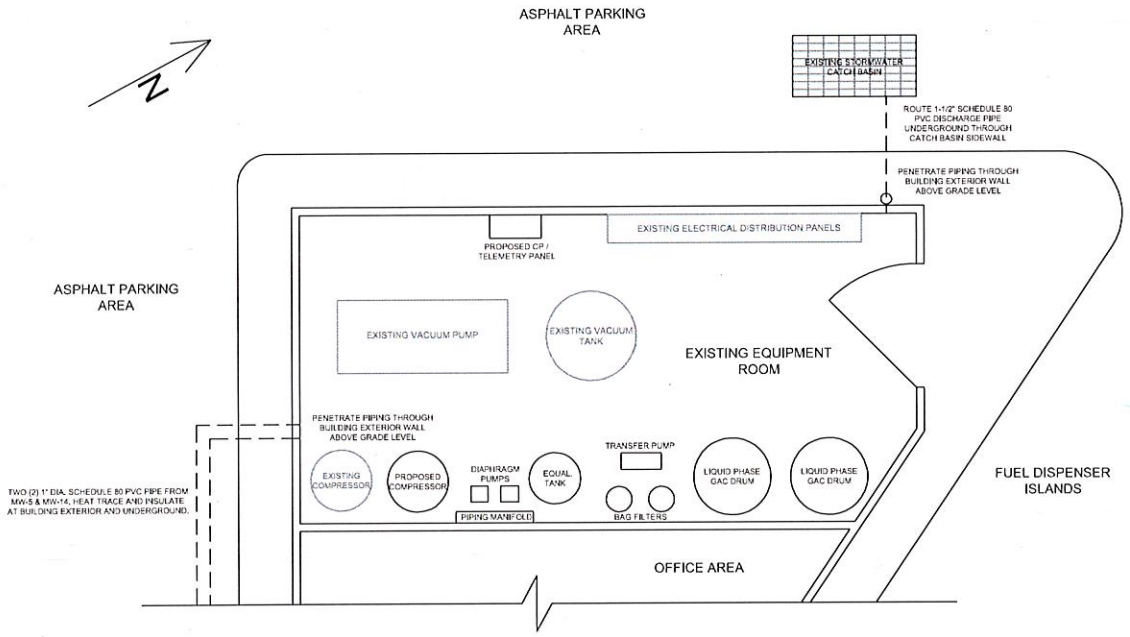
Volume of Gas Discharged from this Source (acfm):	0.28

09255 Hertz Rent-a-Car PCP000000 U1 OS1 (Efficiency Table - CD1)
Print Date: 1/23/2023

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)	100.00	99.00	99.00
NOx			
Other (Total)			
Pb			
PM-10			
PM-2.5			
SO2			
TSP			
VOC (Total)	100.00	99.00	99.00

09255 Hertz Rent-a-Car PCP000000 U1 OS1 (Efficiency Table - CD2)
Print Date: 1/23/2023

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)	100.00	99.00	99.00
NOx			
Other (Total)			
Pb			
PM-10			
PM-2.5			
SO2			
TSP			
VOC (Total)	100.00	99.00	99.00



RECOVERY WELL TREATMENT SYSTEM PLAN

1" = 4 FEET

NOTES:

1. EXISTING EQUIPMENT LOCATION APPROXIMATE FOR CLARITY PURPOSES
2. ALL PIPING PENETRATIONS THROUGH EXTERIOR WALLS SHALL BE SEALED WITH APPROPRIATE FIRE PROTECTION MATERIAL

SCALE
1" = 4 FEET

LEGEND

STATE OF NEW JERSEY
DALE C. KONAS
No. 24GE05342600
LICENSED
PROFESSIONAL ENGINEER

Digitally signed by Dale C Konas
Date: 2022.02.15 09:53:34 -05'00'

DALE C. KONAS
NJ PROFESSIONAL ENGINEER
No. 24GE05342600

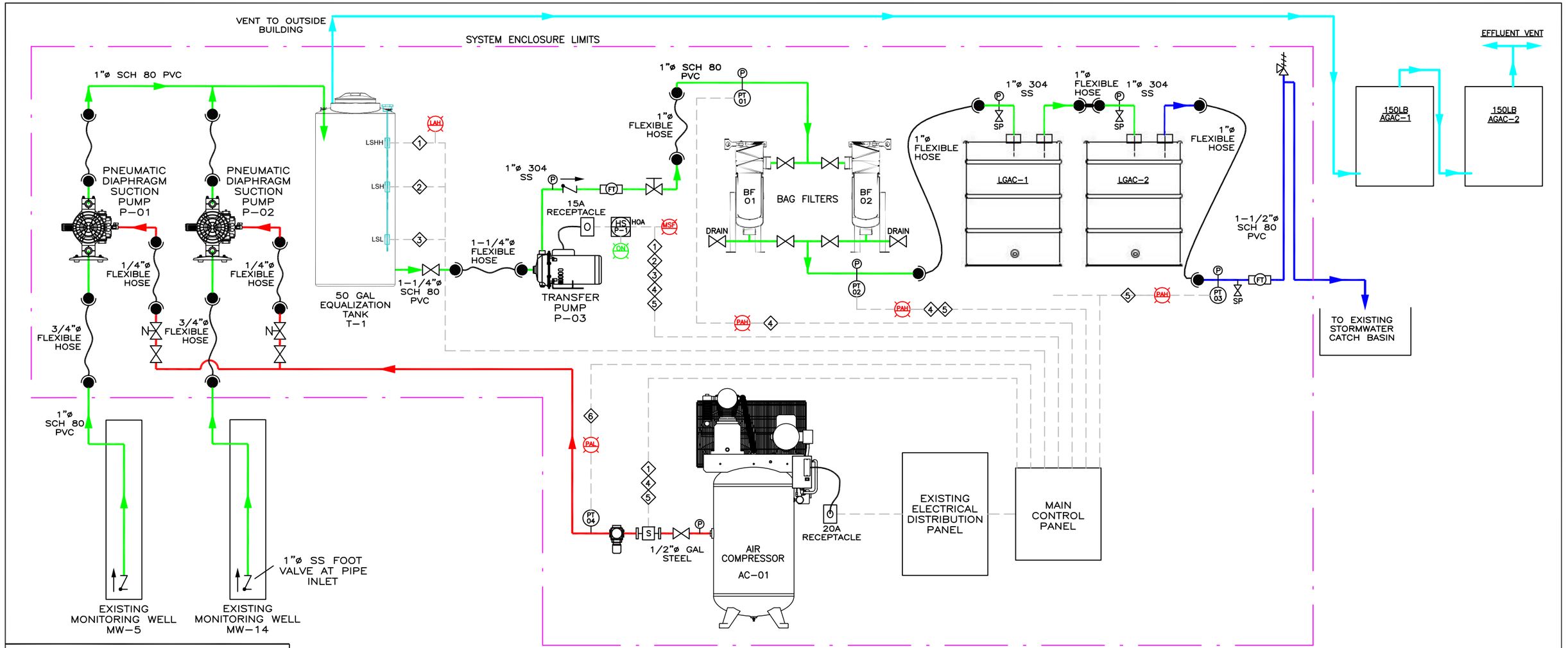
DRAWN/CHECKED BY: DK	REV. DATE: JANUARY 6, 2022
DATE: AUGUST 19, 2021	REV NO. 1.0

PROJECT:
HERTZ RENT-A-CAR
NEWARK INTERNATIONAL AIRPORT
NEWARK, NEW JERSEY

DRAWING TITLE:
RECOVERY WELL TREATMENT SYSTEM LAYOUT

FIGURE: 1

EnviroTrac
ENVIRONMENTAL SERVICES
6 TERRI LANE, SUITE 350, BURLINGTON, NJ 08016
PHONE: (609)387-5553 FAX: (609)387-5533



SYSTEM LEGEND:

- PRESSURE GAUGE
- LEVEL SWITCH
- DIFFERENTIAL PRESSURE SWITCH
- FLOW METER/TOTALIZER
- SOLENOID VALVE
- BALL VALVE
- NEEDLE VALVE
- GATE VALVE
- RELIEF VALVE / VACUUM BREAKER
- COMPRESSED AIR FLOW
- TREATED WATER FLOW
- RAW WATER FLOW
- TANK VENT
- EXISTING STORAGE ROOM LIMITS
- ELECTRIC / SIGNAL LINE

NOTES:

1. PER PANYNJ SPECIAL INSPECTIONS SELECTION SHEET, NO SPECIAL INSPECTIONS ARE REQUIRED FOR THIS WORK

P-01 & P-02
PNEUMATIC DIAPHRAGM SUCTION PUMP
2 GPM @ 70 FT TDH EACH
1/2" DIA. IN/OUT
DAYTON MODEL: 6PY39 OR EQUIVALENT

P-03
ELECTRIC CENTRIFUGAL TRANSFER PUMP
0.5 HP, 13 GPM @ 70 FT TDH
1-1/4" DIA. IN / 1" DIA. OUT
GOULDS MODEL: 100MS1C4E4 OR EQUIVALENT

BF-01 & BF-02
DUPLEX MULTI-BASKET BAG FILTERS
10 MICRON BAG FILTERS, TRADE SIZE 3
PENTAIR/PENTEK MODEL: ES31NA410-75
OR EQUIVALENT

GAC-01 & GAC-02
ACTIVATED CARBON ADSORBER UNITS
200 LBS, 10 GPM MAX
CARBTROL CORPORATION MODEL: L-1 OR EQUIVALENT

T-01
50 GALLON CLOSED TOP, VERTICAL, POLYETHYLENE TANK
PEABODY ENGINEERING MODEL:01-31263
OR EQUIVALENT

AC-01
AIR COMPRESSOR
60 GAL, 5 HP, 1 PH, 230V
INGERSOLL-RAND
MODEL: SS5L5 OR EQUIVALENT

INTERLOCK SCHEDULE:

1. HIGH LEVEL IN T-1 – SHUT DOWN P-3, CLOSE SOLENOID VALVE, SEND ALARM NOTIFICATION.
2. LEVEL AT LSH, TURN ON P-3.
3. LEVEL BELOW LSL, SHUT DOWN P-3.
4. HIGH DIFFERENTIAL PRESSURE ACROSS BAG FILTERS – SHUT DOWN P-3, CLOSE SOLENOID VALVE, SEND ALARM NOTIFICATION.
5. HIGH DIFFERENTIAL PRESSURE ACROSS GAC DRUMS – SHUT DOWN P-3, CLOSE SOLENOID VALVE, SEND ALARM NOTIFICATION.
5. LOW PRESSURE – SEND ALARM NOTIFICATION.

INDICATOR LIGHT INDEX:

- LAH – LEVEL ALARM HIGH
- PAH – PRESSURE ALARM HIGH
- PAL – PRESSURE ALARM LOW
- MSF – MOTOR STARTER FAILURE
- ON – MOTOR RUN INDICATOR

DRAWN/REVISED BY: DK/KN	REV. DATE: JAN 23, 2023
DATE: JANUARY 23, 2023	REV NO. 2.2

PROJECT:
HERTZ RENT-A-CAR
NEWARK LIBERTY INTERNATIONAL AIRPORT
NEWARK, NEW JERSEY

DRAWING TITLE:
RECOVERY WELL TREATMENT SYSTEM P&ID

FIGURE: 2

EnviroTrac
ENVIRONMENTAL SERVICES
6 TERRI LANE, SUITE 350, BURLINGTON, NJ 08016
PHONE: (609)387-5553 FAX: (609)387-5533

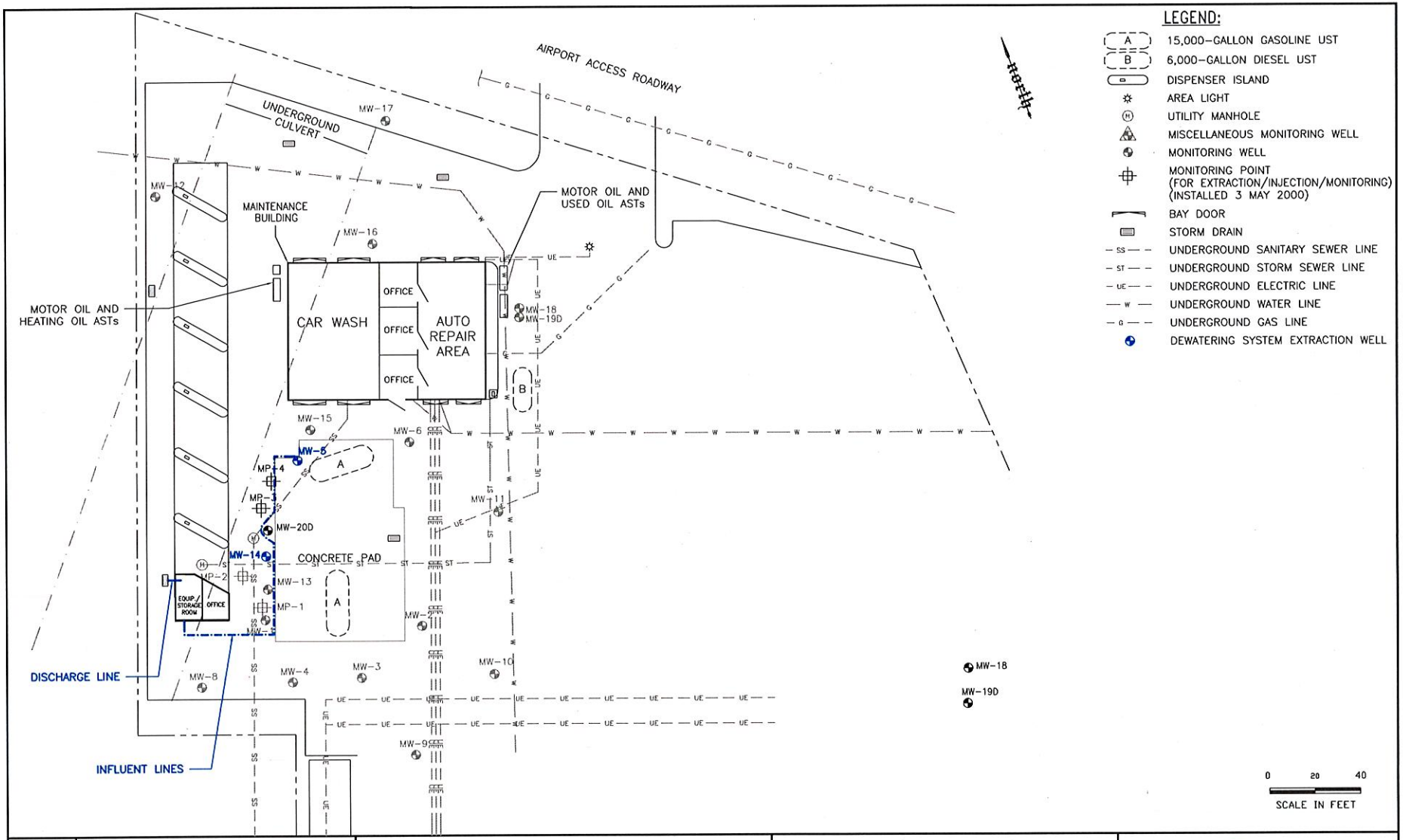


FIGURE #			
4	HERTZ RENT A CAR NEWARK INTERNATIONAL AIRPORT NEWARK, NEW JERSEY	RECOVERY WELL TREATMENT SYSTEM TRENCH DIAGRAM	DRAWN BY: B.S. REVISION DATE: 1/24/2022

DALE C. KONAS
NJ PROFESSIONAL ENGINEER
NJ CERTIFICATE OF AUTHORIZATION No. 24GE05342600

EnviroTrac
ENVIRONMENTAL SERVICES
6 TERRI LANE, SUITE #350, BURLINGTON, NJ 08016
PHONE: (609)387-5553 FAX: (609)387-5533

Hertz NIAP Air Discharge Estimates/Calculations

Volume of air discharge: The pumps are designed to move water via suction, but if the groundwater does not recharge quickly enough, then the pumps may pull air from the monitoring wells (MW5 and MW14). The volume of water recharge is approximately 0.6 gallons per hour total from both wells. The volume of air pumped is estimated to be three times that volume. In addition, as the tank fills, the displaced air is vented until the discharge pump is activated at which point the void is filled with air/water from the wells or fresh air from the vent. Therefore, a value of 3.5 times the volume of water (2.1 gallons per minute) is assigned to the volume of air discharged through the vent line.

Clarification: The system utilizes two pumps with a capacity of 12 gpm each, which was reduced slightly when determining "maximum" flow rate for air in the application, but 2.1 gallons per minute is the estimated actual volume. Calculations are detailed below:

- 0.6 gallons per minute X 3.5 multiplier = 2.1 gallons per minute of air discharged through the vent line.
- 2.1 gallons per minute X 60 minutes per hour X 24 hours per day X 365 days per year = 1,103,760 g/year of air discharge.
- 1,103,760 gallons per year x 0.00378541 m3/gallon = ***4,178.17 m3/year*.**
- 1,103,760 g/year X 1 cubic foot per 7.48 gallons = 147,561 cubic feet per year.
- 2.1 GPM X 1 cubic foot per 7.48 gallons = 0.28 cubic feet per minute.

The discharge of the groundwater, which may have limited LNAPL, into the equalization tank, generates elevated air concentrations. These concentrations are estimated at 10,000 ppmv*. This was estimated based on previous PID readings of contaminated soil and a reading of 5,000 ppmv near the equalization tank during initial operation.

Calculating the weight by volume (mg/m3) of effluent air, prior to treatment:

*ppmv= (mg/m3)(K)(.08205)/MW

ppmv assumed to be 10,000

K=273+13=286

MW=78.11 (MW of benzene used as a representative of VOC MW)

Weight by volume (mg/m3) is to be solved:

mg/m3 = 10,000 x 78.11 / (0.08205 *286) = 33,286 mg/m3

Hertz NIAP Air Discharge Estimates/Calculations

Calculating mass rate of discharge in lbs/hour prior to treatment:

The weight by volume (mg/m3) is multiplied by the flow rate (m3):

Total VOC concentration = 33,286 mg/m3 = 33.286 grams/m3.

33.286 grams/m3 x 0.0022 pounds per gram = 0.07323 lbs per m3

Estimated discharge rate is 4,178.17 m3/year.

0.07323 lbs per m3 X 4,178.17 m3/year = 306 lbs per year total VOCs before treatment

= 0.84 lbs per day (306/365) = 0.035 lbs per hour (0.84/24).

Benzene is ~ 3.74% of the total VOCs (utilizing groundwater concentrations and other information).
306 lbs per year VOCs x 3.74% = 11.4 pounds of benzene per year (0.0013 lbs/hr) prior to treatment.

Proposed Treatment and Monitoring:

Two air carbon drums in series are proposed as the discharge air treatment. Monthly system maintenance and monitoring is to include obtaining PID reading on the effluent of the first carbon drum (CD1). If the effluent value is greater than 50 ppmv, then the carbon from the first drum is to be removed and replaced with new or reactivated carbon. The second drum will then be placed in the primary position and the new/reactivated carbon drum will be placed in position two.

Based on these estimates, after treatment, benzene discharge is estimated at 0.114 pounds per year or 0.000013 pounds per hour. Total VOCs are estimated at 3.06 pounds per year or 0.00035 pounds per hour.

Notes:
GPM= Gallons Per Minute
LNAPL= Light Non-Aqueous Phase Liquid
ppmv= parts per million volume
K= air temperature in degrees Kelvin
MW= molecular weight
VOC= Volatile Organic Compounds
lbs= pounds
mg= milligrams
m3= cubic meters

*Formula from Converting Air Pollutant Concentrations and Other Formulas - Chemical environmental control FAQ - Eng-Tips webpage.