



Department of Environmental Protection

2600 Blair Stone Road • Tallahassee, Florida 32399-2400

DEP Form: 62-761.900(9)
Form Title: Storage Tank Equipment
Registration Form
Effective Date: July 2019
Incorporated in Rule 62-761.850, F.A.C.

Storage Tank System Equipment Registration Form

Fill out completely

General Information

Company Name: Husky Corporation Contact Name: Roger Wiersma
Company Address: 2325 Husky Way City, State: Pacific, MO Zip: 63069
E-mail: rwiersma@husky.com Contact Number: 636-825-7234
Product Name: Model 014509 MK6 Tank Monitor with the Model 007660 Remote Tank Sensor
Model Number(s): 014509 MK6 Monitor, 007660 Remote Sensor Product Type: Shop-Fabricated AST Overfill Alarm
Rule(s) citation that registration is being requested within Chapter 62-761 (UST), and/or 62-762 (AST),
Rules 62-762.851(2), 62-762.501, 62-762.601, and 62-762.701, F.A.C.

F.A.C.: Write a brief description of equipment registration request including product limitations:

The Husky Corporation Model 014509 MK6 Tank Monitor is a high/low tank alarm for use with oil, waste oil, diesel fuel, antifreeze, water and other fluids with a high flash point. The 007660 Remote Tank Sensor is a High/Low level liquid sensor that is compatible with and designed to work with the MK6 Tank Monitor. 007660 Remote Tank Sensor, when connected to t

Information Checklist (Choose Yes, No, or N/A - Not Applicable):

	Yes	No	N/A
1. Third-party Certification by a Nationally Recognized Testing Laboratory? (Required)	☒	☐	☐
2. Documentation of third-party evaluation that the equipment meets DEP Rules?	☒	☐	☐
3. Documents included about the qualifications of the Nationally Recognized Testing Laboratory?	☒	☐	☐
4. Technical information and drawings included?	☒	☐	☐
5. Installation instructions included?	☒	☐	☐
6. Annual Operability Testing Requirements (Rules 62-761.500, 62-762.501, & 62-762.502 F.A.C.)?	☒	☐	☐
7. Integrity Testing Requirements (Rules 62-761.700, 62-762.701, & 62-762.702, F.A.C.)?	☒	☐	☐
8. Compatible with fuel blends containing >10% ethanol or >20% biodiesel?	☒	☒	☐
9. Has the product been approved or registered in other countries or states? (If so provide list)	☒	☐	☐
10. Any requirements for company-certified installers or trainers?	☐	☒	☐
11. Was this product(s) previously approved or registered by the Department? If yes, EQ- _____	☐	☒	☐
12. Any changes or modifications to the equipment since the last submittal to DEP?	☐	☐	☒

Document Information: Provide supporting documents indicated as "Yes" above including this form via email to Tanknotify@floridadep.gov, or documents can be sent to FDEP, Division of Waste Management, 2600 Blair Stone Road, MS 4560, Tallahassee, FL 32399.

Write a brief description of equipment installation and performance in the U.S.:

Relatively new product, similar to previous 007 model with improvements. The high/low level alarm monitoring system can monitor up to 6 tanks independently and is capable of driving a solenoid valve.

Equipment Registration Certification:

To the best of my knowledge and belief, all information submitted on this form is true, accurate and complete.

Marshall T. Mott-Smith, President, Mott-Smith Consulting Group
Printed Name and Title

Marshall T. Mott-Smith
Signature (right click to sign)

03/02/2022
Date

For Department Use Only:

Date Application Received: 3/2/2022 Application complete: Yes: ☒ No: ☐

EQ- 974 Date of complete or incomplete letter sent: 3/9/2022 Date Equipment Requires Renewal: 3/9/2027

Storage tank system equipment requires renewal every 5 years in accordance with subsection 62-761.850(2), F.A.C.

Husky Corporation

Equipment Registration Request

to the

**Florida Department of Environmental Protection's
Compliance Assistance Program**

By the

Husky Corporation

for

Model 014509 MK6 Tank Monitor

with the

Model 007660 Remote Tank Sensor

Submitted by

Marshall T. Mott-Smith, President
Mott-Smith Consulting Group, LLC
111 North Calhoun Street
Tallahassee, FL 32301
marshall@mott-smithconsulting.com
850-391-9835 work
850-591-1434 cell
www.mott-smithconsulting.com





March 2, 2021

Amanda Dorsett,
Environmental Administrator
Florida Department of Environmental Protection
Division of Waste Management
Compliance Assistance Program
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Equipment Registration Request for the Husky Corporation

Dear Amanda,

The Husky Corporation is submitting an Equipment Registration Request to the Florida Department of Environmental Protection for the Model 014509 MK6 Tank Monitor with the Model 007660 Remote Tank Sensor. This system is designed for use with shop-fabricated aboveground tanks containing middle or heavy distillates. They are not intended for use with light distillates like unleaded gasoline.

Ken Wilcox Associates, Inc. performed the third-party certification in 2022 as a Nationally Recognized Laboratory in accordance with Rule 62-762.201(47), F.A.C.

The Husky Corporation appreciates your consideration in this matter, and please feel free to contact me if you have any questions or if we need to provide additional information.

Best Regards,

A handwritten signature in blue ink that reads "Marshall Tipton Mott-Smith". The signature is written in a cursive, flowing style.

Marshall Mott-Smith, President
Mott-Smith Consulting Group, LLC

111 North Calhoun Street
Tallahassee, FL 32301
850.391.9835
www.mott-smithconsulting.com

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1. Introduction

This Equipment Registration Request is sought in accordance with Florida Administrative Code Rule 62-762.851(2). This is a new registration request with a new Third-Party Approval and supporting documentation not previously submitted to the Department.

The Husky Corporation requests that all documents except for the cover page, cover letter, and annual operability testing submitted with this Equipment Approval Request be considered **CONFIDENTIAL**. The reason the Husky Corporation is requesting confidentiality is that because of the proprietary nature of the information, the Husky Corporation does not want to share it with competitors and adversely affect the marketability of their storage tank system components.

The Equipment Registration submittal is sought by the Husky Corporation for the Model 014509 MK6 Tank Monitor with the Model 007660 Remote Tank Sensor and all the accessories. Product specifications, installation instructions, and testing requirements are all provided in the attachments of this document.

The Husky Corporation Model 014509 MK6 Tank Monitor is a high/low tank alarm for use with oil, waste oil, diesel fuel, antifreeze, water and other fluids with a high flash point. The MK6 Tank Monitor has the ability to monitor up to 6 tanks independently. The MK6 is a low voltage system that includes a strobe light, siren and 6 independent LED displays to indicate the status of each of the 6 tanks. When the LEDs are in the normal state, they are green in color. When an alarm condition is generated by the MK6 Tank Monitor, the LED's immediately change from green to red. The MK6 Tank Monitor is capable of driving a solenoid valve for each tank that is monitored. The Model 014509 MK6 Tank Monitor can be mounted remotely anywhere desired within a fueling facility.

The Husky Corporation 007660 Remote Tank Sensor is a High/Low level liquid sensor that is compatible with the MK6 Tank Monitor. The Husky Corporation 007660 Remote Tank Sensor is designed to be used with the Model 014509 MK6 Tank Monitor. The 007660 Remote Tank Sensor, when connected to the MK6 Tank Monitor, detects the presence or loss of liquid wherever the sensor is mounted. The Husky Model 007660 Remote Tank Sensor utilizes a float switch that is used to detect the presence or loss of fuel wherever the sensor is mounted. If the liquid level rises above the threshold of the Model 007660 Remote Tank Sensor wherever it is installed, an alarm condition is generated on the MK6 Tank Monitor indicating that there is liquid present. When the presence or loss of liquid is detected, the Husky MK6 Tank Monitor signals an audible and visual alarm condition. The sensor can easily be removed, cleaned and reinstalled if an alarm is triggered or for periodic testing of the MK6 Tank Monitor.

The Model 014509 MK6 Tank Monitor with the Model 007660 Remote Tank Sensor are corrosion-resistant, durable, and use UL listed components and parts. They are constructed of materials that are compatible with petroleum products and can be easily installed at new or existing sites.

The Husky Corporations' Model 014509 MK6 Tank Monitor with the Model 007660 Remote Tank Sensor are designed to be installed in the field by experienced installers and contractors for shop-fabricated aboveground storage tanks and tank components. The installation instructions are contained in Attachment 3. The post-installation integrity of these systems can be verified using the testing procedures provided by the Husky Corporation in their product installation instruction documents. The Model 014509 MK6 Tank Monitor is designed to be used with the Model 007660 Remote Tank Sensor. Strict quality control is provided during the manufacturing of these systems.

The Model 014509 MK6 Tank Monitor with the Model 007660 Remote Tank Sensor are designed for monthly visual inspections or electronic notification as required by Florida Underground Storage Tank Systems rules.

2. Third Party Certification

The Third-Party Certification was completed by Ken Wilcox Associates, Inc. in February, 2022 and confirms that the products meet the Department rules contained in Chapter 62-762.501, Chapter 62-762.601, and Chapter 62-762.701, F.A.C. The Model 014509 MK6 Tank Monitor with the Model 007660 Remote Tank Sensor are compatible with applicable industry reference standards for shop-fabricated aboveground storage tanks. Ken Wilcox certifies in his evaluation that the systems provide an equivalent protection to the existing rules.

Ken Wilcox Associates, Inc. has performed hundreds of equipment evaluations for state equipment approval requests. His company meets the definition of a Nationally Recognized Laboratory as defined in Rule 62-762.201(47), F.A.C., and as required in Rule 62-762.851(2), F.A.C.

The Third-Party Certification is provided in Attachment 1 of this Request and meets the Department rules. Ken Wilcox Associates, Inc. conducted the evaluation in accordance with the procedures described in the attachment. Ken Wilcox Associates, Inc. concluded that the Husky Corporation Model 014509 MK6 Tank Monitor with Model 007660 Remote Tank will detect the presence or loss of liquid wherever the sensor is installed once the sensors threshold is exceeded.

3. The Installation Process

The installation procedures for the Model 014509 MK6 Tank Monitor with the Model 007660 Remote Tank Sensor are provided in Attachment 3. The installation procedures contain prescribed instructions for installers to install the equipment with attention to quality control, operability, safety, and leak detection effectiveness. The Husky Corporation does not have any limitations or certifications on who can install their systems, but as previously mentioned, the systems are designed to be installed in the field by experienced installers and contractors for shop-fabricated aboveground storage tanks and tank components.

The Model 014509 MK6 Tank Monitor with the Model 007660 Remote Tank Sensor are manufactured in accordance with the highest industry standards. All of the models are resistant to corrosion, UV and weather resistant, and able to withstand deterioration. Tank owners and operators have options that are provided in the product features in Attachment 2. The initial installation operability testing procedures and warranty information are in the installation instructions.

4. Operability Testing

The Model 014509 MK6 Tank Monitor with the Model 007660 Remote Tank Sensor Operability Testing requirements are recommended by the manufacturer to be tested monthly. Nevertheless, the operability testing procedures must be performed annually to meet the Department's requirements for annual operability testing in accordance with Rule 62-762.601(7), F.A.C. The operability testing procedures for the annual testing are the same as the monthly testing.

5. Compatibility

The only portions of the Husky Corporations' Model 014509 MK6 Tank Monitor with the Model 007660 Remote Tank Sensors that are in contact with petroleum products are the floats and the float support mechanisms. These systems are constructed with corrosion resistant materials like that are compatible with the middle and heavy distillate products they are designed to be in contact with. Again, the Husky Corporations' Model 014509 MK6 Tank Monitor with the Model 007660 Remote Tank Sensor have a restriction on the types of fuel that their leak detection systems can be used with – preferably middle distillates such as diesel, aviation fuels, jet fuel, and kerosene, as well as heavier fuels, waste oils, and new oils.

6. Operation and Maintenance

The Model 014509 MK6 Tank Monitor with the Model 007660 Remote Tank Sensor can be easily cleaned and maintained, and the daily and monthly maintenance instructions are specified for each system in the installation procedures in Attachment.

Attachment 1 – Evaluation by Ken Wilcox Associates, Inc.



Evaluation of the Husky Corporation Model 014509 MK6 Tank Monitor

Evaluated with the Model 007660 Remote Tank Sensor

Final Report Version 2

PREPARED FOR:
Husky Corporation

February 18, 2022

Ken Wilcox Associates, Inc.
1125 Valley Ridge Drive, Grain Valley, MO 64029, USA
Voice (816) 443-2494, Fax (816) 443-2495
E-mail cwilcox@kwaleak.com, Web <http://www.kwaleak.com>

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Evaluation of the Husky Corporation Model 014509 MK6 Tank Monitor

Final Report Version 2

**PREPARED FOR:
Husky Corporation
2325 Husky Way
Pacific, MO 63609**

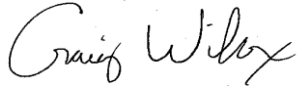
February 18, 2022

Preface

This report presents the results of an independent third-party evaluation of the Husky Corporation Model 014509 MK6 Tank Monitor with Model 007660 Remote Tank Sensor. The evaluation was conducted by Ken Wilcox Associates, Inc. using procedures described in section 4.5.1, "Liquid Phase Sensor Test Procedures", of the 2019 revised standard protocol "Standard Test Procedures for Evaluating Release Detection Methods: Volumetric and Non- volumetric Tank Tightness Testing", May 2019. The official results of this evaluation are contained in Attachment A of this report on the EPA Results forms. All work was conducted by Ken Wilcox Associates, Inc. at the Fuels Management Research Center in Grain Valley, Missouri.

This report was prepared by Craig D. Wilcox, Ken Wilcox Associates, Inc. Technical questions regarding this evaluation should be directed to Craig Wilcox at (816) 443-2494.

KEN WILCOX ASSOCIATES, INC



Craig Wilcox, President
February 18, 2022

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Attachment A. Results Forms for the Sensor

1.0 Husky Corporation Model 014509 MK6 Tank Monitor with Model 007660 Remote Tank Sensor

Husky Corporation Model 014509 MK6 Tank Monitor with Model 007660 Remote Tank Sensor

The Husky Corporation Model 014509 MK6 Tank Monitor is a high/low tank alarm for use with oil, waste oil, diesel fuel, antifreeze, water and other fluids with a high flash point. The MK6 Tank Monitor has the ability to monitor up to 6 tanks independently. The MK6 is a low voltage system that includes a strobe light, siren and 6 independent LED displays to indicate the status of each of the 6 tanks. When the LEDs are in the normal state, they are green in color. When an alarm condition is generated by the MK6 Tank Monitor, the LED's immediately change from green to red. The MK6 Tank Monitor is capable of driving a solenoid valve for each tank that is monitored. The Model 014509 MK6 Tank Monitor can be mounted remotely anywhere desired within a fueling facility.

The Husky Corporation 007660 Remote Tank Sensor is a High/Low level liquid sensor that is compatible with the MK6 Tank Monitor. The Husky Corporation 007660 Remote Tank Sensor is designed to be used with the Model 014509 MK6 Tank Monitor. The 007660 Remote Tank Sensor, when connected to the MK6 Tank Monitor, detects the presence or loss of liquid wherever the sensor is mounted. The Husky Model 007660 Remote Tank Sensor utilizes a float switch that is used to detect the presence or loss of fuel wherever the sensor is mounted. If the liquid level rises above the threshold of the Model 007660 Remote Tank Sensor wherever it is installed, an alarm condition is generated on the MK6 Tank Monitor indicating that there is liquid present. When the presence or loss of liquid is detected, the Husky MK6 Tank Monitor signals an audible and visual alarm condition. The sensor can easily be removed, cleaned and reinstalled if an alarm is triggered or for periodic testing of the MK6 Tank Monitor.

2.0 Evaluation Procedures

Test Apparatus

The evaluation of this system was designed to determine if the liquid level sensor operates as described by the vendor. The sensor was mounted in a test container in which different types of liquid were added including water, diesel fuel and unleaded gasoline.

Threshold Determination

A peristaltic pump was used to add or remove the liquid from the test cylinder containing the sensor until the sensor alarmed. The threshold was measured directly with a dial micrometer. This procedure was repeated a total of 10 times for each test fluid.

Detection Time

The time required for the sensor to respond to product levels beyond the sensor's threshold is the sensors detection time. The average time to alarm for the 10 tests conducted for each product type is reported as the detection time.

Fall Times

The time required for the sensor to stop responding once the product level has been raised or lowered within the sensor's threshold is the sensors fall time. The average fall time for the 10 tests conducted for each product type is reported as the fall time.

Specificity

The specificity defines the different products that liquid level sensor will respond to. Most sensors will respond to any liquid once the sensors threshold level has been exceeded unless the sensor has been designed otherwise. The testing conducted for this evaluation determined the sensors response to water, diesel fuel and unleaded gasoline.

3.0 Test Results

The data and results for the Model 014509 MK6 Tank Monitor with Husky Corporation Model 007660 Remote Tank Sensor are contained in Table 1.

Lower Detection Level (Threshold)

The sensor was only tested for its ability to detect liquid levels at the alarm levels.

Precision (Standard Deviation)

Ten replicates were conducted for each liquid level for the sensor. The standard deviation was determined from these replicates.

Detection Time

The sensor alarms within a few seconds after the threshold is reached. This will be true for any liquid in the reservoir. The manufacturer supports a detection time of less than 1 minute.

Fall Time

The sensor stops alarming within 1 second after the liquid level drops below the alarm threshold. The manufacturer supports a fall time of less than 1 minute. For each of the liquid types after the 10 threshold tests, the fall time was recorded as less than 1 second.

Specificity

This sensor will respond to any liquid after the sensor's threshold is exceeded. The liquids used for this evaluation were water, unleaded gasoline and diesel fuel.

Time to Alarm under Operating Conditions

The time for a liquid sensor to alarm will depend on the size and geometry of the space in which it is installed and the rate of leakage into or out of this space. The time to alarm can be calculated by dividing the volume necessary to reach the threshold by the leak rate.

Test Results for the Model 014509 MK6 Tank Monitor with Model 007660 Remote Tank Sensor

Table 1. Results of the 014509 Model MK6 Tank Monitor with 007660 Remote Tank Sensor

Run #	Height at Alarm(inches)		
	Unleaded	Water	Diesel
1	0.856	0.748	0.838
2	0.856	0.743	0.843
3	0.851	0.748	0.833
4	0.856	0.758	0.838
5	0.856	0.748	0.843
6	0.861	0.748	0.838
7	0.856	0.748	0.833
8	0.861	0.748	0.843
9	0.851	0.748	0.838
10	0.851	0.748	0.843

Mean	0.8555	0.7485	0.8385
STDEV	0.0037	0.0037	0.0039
Threshold	0.8692	0.7622	0.8531

4.0 Conclusions

Microsoft has conducted this evaluation in accordance to the procedures described in section 4.5.1, "Liquid Phase Sensor Test Procedures", of the 2019 revised standard protocol "Standard Test Procedures for Evaluating Release Detection Methods: Volumetric and Non- volumetric Tank Tightness Testing", May 2019. Ken Wilcox Associates, Inc. has come to the conclusion that the Husky Corporation Model 014509 MK6 Tank Monitor with Model 007660 Remote Tank, as evaluated in this report, will detect the presence or loss of liquid wherever the sensor is installed once the sensors threshold is exceeded.

CONFIDENTIAL

Attachment A

Results Forms for the Husky Corporation Model 014509 MK6 Tank Monitor with Model 007660 Remote Tank Sensor

Results of U.S. EPA Alternative Evaluation

Liquid Level Sensor

This form documents the performance of the liquid level sensor described below. The evaluation was conducted by the equipment manufacturer or a consultant to the manufacturer according to the U.S. EPA's requirements for alternative protocols. The full evaluation report also includes a report describing the method, a description of the evaluation procedures, and a summary of the test data.

Tank owners using this system should keep this form on file to prove compliance with the federal regulations. Tank owners should check with state and local agencies to make sure this form satisfies their requirements.

Method Description

Name Husky Corporation Model 014509 MK6 Tank Monitor with Model 007660

Remote Tank Sensor

Version number(s) Husky Corporation Model 014509 with MK6 Tank Monitor Model 007660 Remote Tank Sensor

Vendor Husky Corporation
(Name of Manufacturer)

2325 Husky Way
(Address)

<u>Pacific</u>	<u>Missouri</u>	<u>63609</u>	<u>(800) 325-3558</u>
(City)	(State)	(Zip Code)	(Phone)

Evaluation Parameters

The sensor listed above was tested for the abilities to respond to liquids when the sensor is installed in underground storage tank applications. The following parameters were determined from this evaluation.

Threshold Levels – The liquid levels at which alarms are triggered.

Precision (standard deviation) - Agreement between multiple measurements of the same product level.

Detection Time - Amount of time the detector must be exposed to product before it responds.

Fall Time - Amount of time before the detector stops responding after being removed from the product.

Specificity - Types of products that the sensor will respond to.

Evaluation Results

Note: If the test data can be presented in a more appropriate manner, the evaluator may select to present the information below in a data table, which can be attached to these forms.

Evaluation Results of the Husky Corporation Model 014509 MK6 Tank Monitor with Model 007660 Remote Tank Sensor

Table 1. Results of the 014509 Model MK6 Tank Monitor with 007660 Remote Tank Sensor

Description	Height at Alarm(inches)		
	Unleaded	Water	Diesel
Threshold (inches)	0.8692	0.7622	0.8385
Precision (Standard Deviation)	0.0037	0.0037	0.0039
Fall Time (minutes)	< 1 second	< 1 second	< 1 second
Detection Time (minutes)	< 1 second	< 1 second	< 1 second

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Specificity – The Husky Corporation Model 014509 MK6 Tank Monitor with Model 007660 Remote Tank Sensor evaluated in this report will respond to any liquid after its threshold is exceeded. This testing was specifically for performance using water, diesel fuel and unleaded fuel.

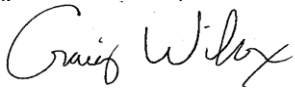
Additional Limitations or Considerations - None

> Safety Disclaimer: This test procedure only addresses the issue of the methods ability to respond to liquids. It does not test the equipment for safety hazards.

Certification of Results

I certify that the liquid level sensor was tested under conditions according to the vendor's operating instructions. I also certify that the evaluation was performed using methods described in the CAN/ULC-S675.2-14 standard under protocol "Alternative Test Procedures for Evaluating Leak Detection Methods: Evaluation of Liquid Level Sensors", Ken Wilcox Associates, September 1996 and that the results presented above are those obtained during the evaluation.

Craig Wilcox, President
(printed name)



(Signature)

Ken Wilcox Associates, Inc.
(organization performing evaluation)

Grain Valley, MO 64029
(city, state, zip)

February 18, 2022
(date)

(816) 443-2494
(phone number)

Attachment 2
Product Model Features

MK6 Tank Alarm



3-15

TANK GAUGES AND ALARMS

High/Low Tank Alarm for use with oil, waste oil, diesel fuel, antifreeze, water and other fluids with a high flash point.

- Monitor up to 6 tanks independently.
- Tank probes sold separately
- Avoid costly overflows or untimely shortages.
- Supervised system.
- Low voltage.
- Strobe and siren.
- 6 independent LED displays
- to indicate which circuit is in alarm.
- Easy installation.
- Maximum milliamp load is 750 mA.
- Capable of driving a solenoid valve for each tank monitored.

New Gauges and Alarms

MODEL NO.	DESCRIPTION	SHIPPING WEIGHT LBS (KG)
014509	MK6 Audible and Visual Tank Gauge (includes indoor mount control panel, and 12 volt transformer)	4.0 (1.8)



WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov



MK6 Tank Alarm

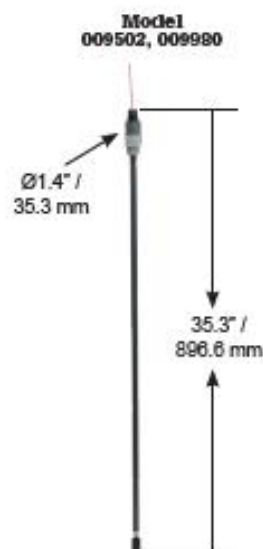
High/Low Tank Alarm for use with oil, waste oil, diesel fuel, antifreeze, water and other fluids with a high flash point.

Dimensions and System Options

Accessories

MODEL NO.	DESCRIPTION
007595	12 volt Transformer
007660	Remote Tank Sensor
007936*	Remote Jarhead Tank Sensor with 2" tank fitting
008206*	Remote Jarhead Tank Sensor with 1-1/2" tank fitting
007655	Remote Leak Guard Tank Sensor with 2" tank fitting
007656	Remote Leak Guard Tank Sensor with 1-1/2" tank fitting
007742	Remote Overfill Guard Tank Sensor with 2" tank fitting
007743	Remote Overfill Guard Tank Sensor with 1-1/2" tank fitting
007695	Strobe Light
007690	Siren - 107 Decibels
007645	Heavy Duty Power Relay - 30 amp or 1-1/2" HP at 120 or 240 vac
009503	Remote 55 Gallon Drum High Level Sensor
009980	Remote 55 Gallon Drum Low Level Sealed Sensor
010000	Remote 55 Gallon Drum High Level Sealed Sensor

*Specify tank depth (in inches) and rise height (in inches).



2325 Husky Way • Pacific, MO 63069
(800) 325-3558 • Fax (636) 825-7300
www.husky.com • sales@husky.com

MADE IN THE U.S.A.



Attachment 3 – Installation Instructions

 BJE	014509 Recommended Installation, Maintenance and Inspection Instructions MK6 Tank Monitor	MONITOR
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IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS IN AN EASILY ACCESSIBLE LOCATION.

 **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov

 **WARNING** Never use with gasoline or highly flammable liquids.

INSTALLATION INSTRUCTIONS

1. Locate the most visible location to install control panel.
2. Securely (not permanently) mount control panel to wall.
3. Connect the remote tank sensor:
 - Waste Product Applications - (High Level Alarm)
 - Thread sensor wires through the ½" to ¾" (12.7 mm to 3.17 mm) NPT PVC adaptor.
 - Attach sensor to adaptor - tighten approximately 1 to 2 turns past hand tight. Do not overtighten.
 - Thread sensor wires through ½" x 6" (12.7 mm x 152.4 mm) NPT PVC pipe.
 - Attach pipe to adaptor - tighten approximately 1 to 2 turns past hand tight. Do not overtighten.
 - Thread sensor wires through housing base.
 - Attach pipe to housing base - tighten approximately 1 to 2 turns past hand tight. Do not overtighten.
 - Connect sensor leads to an ohmmeter and confirm circuit is broken when float is raised, if not: remove retaining clip from float - reverse the direction of the float - reinstall retaining clip.
 - Use appropriate thread sealant on male threads of sensor housing.
 - Tighten sensor housing to tank bung - approximately 1 to 2 turns past hand tight - do not overtighten.
 - Thread wires from printed circuit board through the hole in the side of the sensor housing and secure.
 - Solder (or wire nut) float leads then tape the connections.
 - Seal hole with silicone or appropriate sealant.
 - Connect wires to printed circuit board terminals marked "SENS1".
 - Flip the tank control switch marked 1 to 'ON'.
 - Repeat this process for each tank to be monitored, proceeding to SENS2 and switch 2, etc.
 - For Bulk Product Applications - (Low Level Alarm)
 - As above, but first do the following:
 - Discard factory supplied pipe and replace with custom pipe (maximum length 10 ft / 3 m).
 - Remove retaining clip from float.
 - Reverse the direction of the float.
 - Reinstall retaining clip.
4. Select a non-switched 24-hour hot 115v outlet, preferably dedicated solely for use with the 007.
5. Connect transformer wires to printed circuit board terminal marked "12VDC POWER IN" .
6. Test control panel to confirm audible siren sounds and strobe light flashes.

Do not plug in the transformer prior to connecting wires to control panel.

Only use BJE® brand transformer with MK6 Tank Monitors.

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**ALWAYS ADHERE TO INSTALLATION / USAGE INSTRUCTIONS AND WARNINGS.**

Improper use may result in injury, damage, or hazardous spill.

**GENERAL WARNINGS / INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK OR INJURY TO PERSONS:**

- Use of equipment is at individuals' own risk.
- Always abide and adhere to city, state, and federal regulations regarding use and installation of monitoring equipment.
- Always follow the product manufacturer's installation and maintenance instructions.
- Always turn off all power to monitor during maintenance activities.
- Always replace or remove from service damaged equipment immediately.
- Always report leaks / spills / accidents to appropriate authorities.
- Always wear appropriate safety equipment during maintenance and inspection activities.
- Always have appropriate fire extinguishing equipment within 5 ft / 1.5 m of tanks.
- Always use appropriate thread sealant.
- The tank contents are the sole responsibility of the tank owner.
- Never allow waste product to touch eyes or skin.
- Never install monitors outdoors without proper protection from the elements.
- Never use on below ground storage tanks.
- Never exceed the maximum milliamps specified in manufacturer's installation and maintenance instructions.
- Never solely rely on this product; there is no substitute for human supervision.
- Never to be used as a component of any automatically controlled pump transfer system.

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WARRANTY

Husky Corporation will, at its option, repair, replace, or credit the purchase price of any BJE® now part of Husky®, product deemed to be defective in material and/or workmanship for a period of one (1) year.

Buyer must return the products to Husky, transportation charges prepaid. The warranty excludes damages due to malfunction, failure to follow manufacturer's installation, operation or maintenance instructions and guidelines, unauthorized modifications or alterations, abuse, or misuse.

The warranty provisions contained herein apply only to original purchasers who use the equipment for commercial or industrial purposes. There are not other warranties of merchantability, fitness for a particular purpose, or otherwise, and any other such warranties are hereby specifically disclaimed.

Husky assumes no liability for labor charges or other costs incurred by Buyer incidental to the service, adjustment, repair, return, removal or replacement of products. Husky is not responsible for any losses (including loss of profits or revenues) incurred by the purchaser during the time necessary to repair the equipment. Husky assumes no liability for any incidental, consequential, or other damages under any warranty, express or implied, and all such liability is hereby expressly excluded.

Husky reserves the right to change or improve the design of any Husky Oil Filter Crushers, Tank Monitors, Tank Gauges, Overfill Alarms, Overfill Accessories, Air Shut-off Valves, Solenoid Valves, and Electronic Drain Valves without assuming any obligations to modify any Husky Oil Filter Crushers, Tank Monitors, Tank Gauges, Overfill Alarms, Overfill Accessories, Air Shut-off Valves, Solenoid Valves, and Electronic Drain Valves previously manufactured.

TESTING / MAINTENANCE / INSPECTION



Daily

- Confirm the circuits in use are lit green
- Confirm Siren toggle switch is in the "ON" position.
- Confirm audible siren sounds.
- Confirm strobe light flashes.



Monthly

- Remove sensors from tanks and manually raise / lower float to verify system goes into alarm mode.
- Manually test all accessories for proper function.
- Confirm all wires are properly connected to control panel and accessories.

- Follow all city, state, or federal wiring code requirements as appropriate.
- Apply city, state, or federal testing regulations as appropriate.

**ANY TEST / INSPECTION FAILURE REQUIRES
IMMEDIATE EQUIPMENT REPLACEMENT OR
REMOVAL FROM SERVICE.**

MADE IN THE USA

Confidential – Except for Testing Above - for Daily & Monthly

TROUBLESHOOTING GUIDE

Alarm won't shut off...

1. Verify all wires are connected correctly.

System won't go into alarm mode...

1. Confirm float is in the correct orientation.
2. Confirm transformer is plugged in.

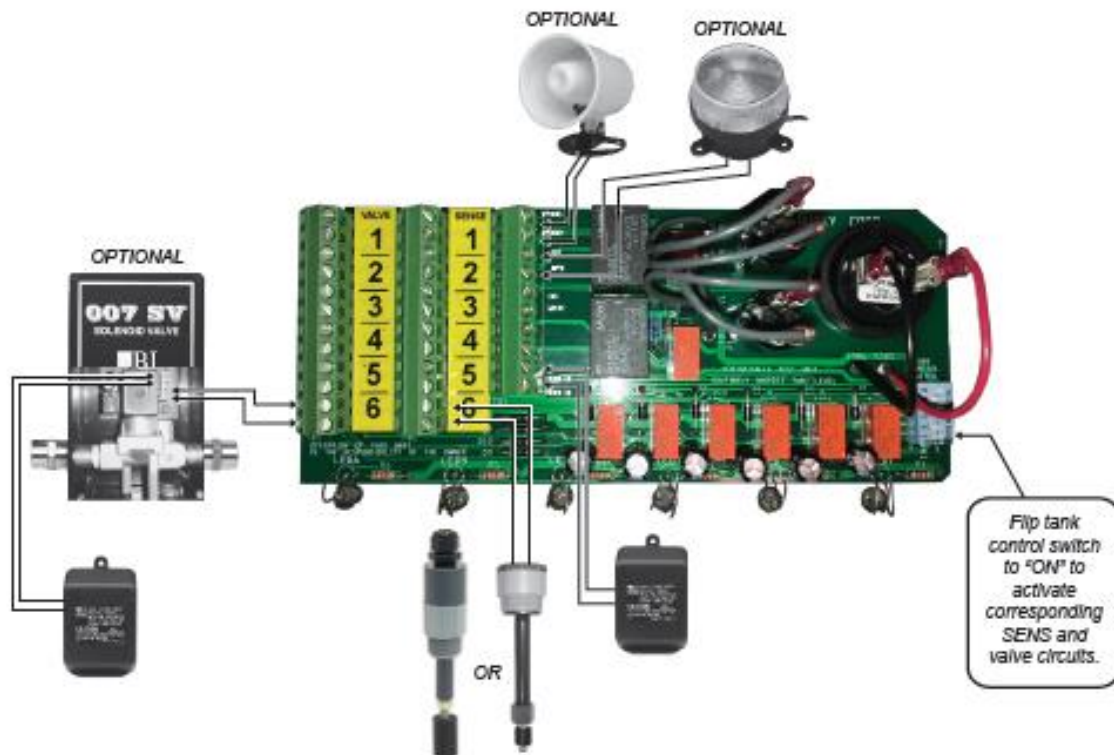
GENERAL TECHNICAL DATA

Applications	Single or double walled above ground tanks.
Fluids	Test and warranty for oil, waste oil, diesel fuel, antifreeze, water and other non-volatile fluids
Milliamp load	750 mA maximum / 1000 mA maximum of optional accessories
Pipe	½" x 6" NPT PVC
Sensor	Buna
Shipping Weight	3.4 lbs / 1.5 kg
Thread	2" / 50.8 mm NPT
Case Quantity	10

IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS IN A READILY ACCESSIBLE LOCATION.

WIRING CONNECTIONS

Use 18-gauge / 2 conductor wire up to 150 ft. (45.7 m) or
14 gauge / 2 conductor wire up to 350 ft. (106.6 m) to connect all components.



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007 REMOTE JARHEAD SENSOR

Model 007936

1. Assemble gauge (do not install to tank).
2. Loosen thumbscrews on sensor
3. Slide sensor to desired depth (high or low).
4. Connect an ohmmeter to sensor leads.
5. Slowly move float arm up and down to assure circuit is broken at desired level.
6. Once proper setting is achieved, lock sensor in place using thumbscrews - tighten firmly, approximately 1 to 2 turns past hand tight, but do not overtighten.
7. Remove glass jar and linkage assembly from bung adaptor - do not disturb sensor setting.
8. Use appropriate sealant on male threads of bung adaptor.
9. Screw bung adaptor into tank bung opening - tighten

- firmly, approximately 1 or 2 turns past hand tight, but do not overtighten.
10. Install linkage assembly into bung adaptor. Float arm must travel freely and not contact any baffles or the sides of tank (use groove on top of assembly as a guide).
11. Reinstall glass jar - tighten firmly, approximately 1 or 2 turns past hand tight, but do not overtighten.
12. Solder (or wire nut) sensor leads then tape the connections.
13. Seal hole with silicone or appropriate sealant.
14. Connect wire to printed circuit board terminals marked "SENS".

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007 REMOTE LEAK / OVERFILL GUARDS

Model 007655, 007656 Leak Guards

007742, 007743, Overfill Guards

1. Remove eyelet connector from end of chain and save.
2. Determine tank depth in inches.
3. Stand float on end on a flat work surface alongside a measuring tape and pull chain taut to desired measurement.
4. Cut chain on mark and feed chain through bottom center hole in shaft and back out of either hole on sides of shaft.
5. Secure chain with eyelet by crimping eyelet closed.
6. Loosen thumbscrews on sensor.
7. Slide sensor, positioning arrow just inside top of clear window.
8. Connect an ohmmeter to sensor leads.
9. Using chain, pull orange indicator to bottom of gauge and confirm circuit is closed.
10. Slowly release chain tension allowing spring to raise orange indicator to its full extension.

11. Confirm circuit is now open.
12. Tighten thumbscrews firmly, approximately 1 to 2 turns past hand tight - do not overtighten.
13. Apply appropriate sealant to male threads of bung adaptor.
14. Slowly lower weighted float into tank and tighten gauge, approximately 1 to 2 turns past hand tight. Do not overtighten.
15. Confirm orange indicator at proper level - if tank is empty it should not be visible. (If visible, remove sight glass and depress orange indicator. Reinstall sight glass. If orange indicator is still visible, recheck measurements in steps 2 - 4 and shorten chain as required.)
16. Solder (or wire nut) sensor leads then tape the connections.
17. Seal hole with silicone or appropriate sealant.
18. Connect wire to printed circuit board terminals marked "SENS"

007SV / 007SVT SOLENOID VALVE

Model 007580, 007570

1. Mount solenoid valve and plumb air supply observing airflow direction and assuring air line is free of debris. Caution - use backup wrench.
2. Connect terminals marked "From 007" on the solenoid valve to terminals marked "VALVE" on the printed circuit board.

3. Connect supplied transformer to terminals marked "12VDC POWER IN" on the solenoid valve. (Observation of polarity is not necessary.)
4. Plug transformer into a non-switched 24-hour hot 115v.
5. Test solenoid valve for proper air shut off. (VALVE 1 should shut off when SENS1 enters alarm. VALVE 2 should similarly correspond to SENS2, ect.).

007 SPDT POWER RELAY

Model 007645

1. Install power relay in proper enclosure for application.
2. Connect terminals marked 1 & 2 on the power relay to

terminals marked "VALVE" on the printed circuit board. (Observation of polarity is not necessary.)

007 REMOTE STROBE LIGHT

Model 007695

1. Connect strobe leads to terminals marked "POWER OUT ON ALARM" on the printed circuit board.

2. Connect red lead to (+) terminal and black lead to (-) terminal.
 3. Polarity must be observed.
- NOTE: For indoor or outdoor use.

007 REMOTE SIREN

Model 007690

1. Connect siren leads to terminals marked "MUTED OUT ON ALARM" on the printed circuit board.

2. Connect white lead to (-) terminal.
 3. For steady siren, connect yellow lead to (+) terminal. For yelp tone connect red lead to (+) terminal.
- NOTE: If mounting outdoors, angle siren down to shed water.

007 REMOTE 55 GALLON DRUM SENSOR

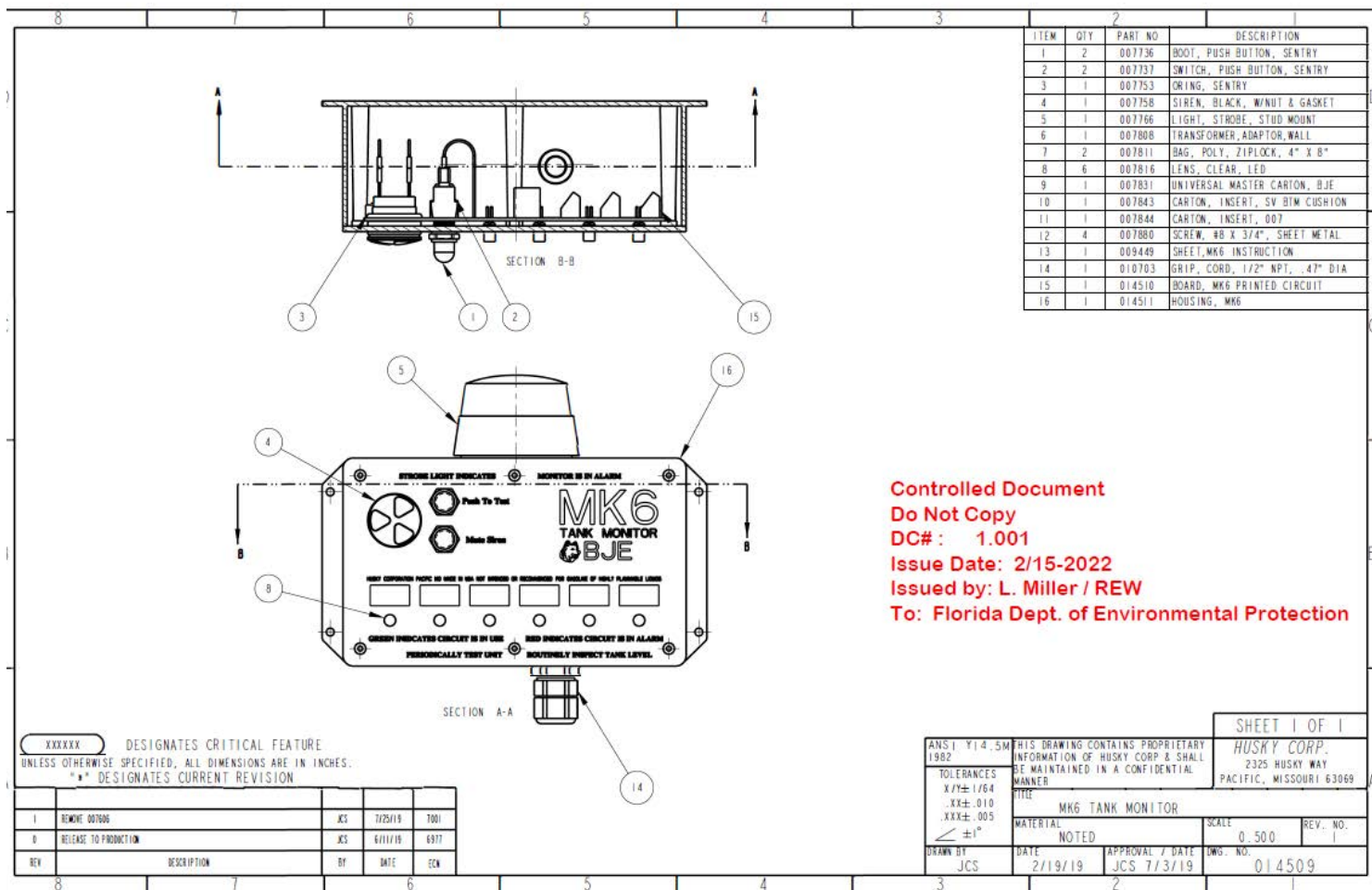
Model 009502, 009503, 009980, 010000

1. Tighten sensor housing to drum 3/4 NPT vent bung - approximately 1 to 2 turns past hand tight. Do not overtighten.

2. Thread alarm wires through hole of the sensor housing and secure.
3. Connect wires to printed circuit board terminals marked "SENS".

Attachment 4 – Technical Drawings

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**Attachment 5 – FDEP Form 62-761.900(9), F.A.C
Storage Tank System Equipment Registration Form**



Department of Environmental Protection

2600 Blair Stone Road • Tallahassee, Florida 32399-2400

DEP Form: 62-761.900(9)
Form Title: Storage Tank Equipment
Registration Form
Effective Date: July 2019
Incorporated in Rule 62-761.850, F.A.C.

Storage Tank System Equipment Registration Form

Fill out completely

General Information

Company Name: Husky Corporation Contact Name: Roger Wiersma
Company Address: 2325 Husky Way City, State: Pacific, MO Zip: 63069
E-mail: rwiersma@husky.com Contact Number: 636-825-7234
Product Name: Model 014509 MK6 Tank Monitor with the Model 007660 Remote Tank Sensor
Model Number(s): 014509 MK6 Monitor, 007660 Remote Sensor Product Type: Shop-Fabricated AST Overfill Alarm
Rule(s) citation that registration is being requested within Chapter 62-761 (UST), and/or 62-762 (AST),
Rules 62-762.851(2), 62-762.501, 62-762.601, and 62-762.701, F.A.C.

F.A.C.: Write a brief description of equipment registration request including product limitations:

The Husky Corporation Model 014509 MK6 Tank Monitor is a high/low tank alarm for use with oil, waste oil, diesel fuel, antifreeze, water and other fluids with a high flash point. The 007660 Remote Tank Sensor is a High/Low level liquid sensor that is compatible with and designed to work with the MK6 Tank Monitor. 007660 Remote Tank Sensor, when connected to t

Information Checklist (Choose Yes, No, or N/A - Not Applicable):

	Yes	No	N/A
1. Third-party Certification by a Nationally Recognized Testing Laboratory? (Required)	☒	☐	☐
2. Documentation of third-party evaluation that the equipment meets DEP Rules?	☒	☐	☐
3. Documents included about the qualifications of the Nationally Recognized Testing Laboratory?	☒	☐	☐
4. Technical information and drawings included?	☒	☐	☐
5. Installation instructions included?	☒	☐	☐
6. Annual Operability Testing Requirements (Rules 62-761.500, 62-762.501, & 62-762.502 F.A.C.)?	☒	☐	☐
7. Integrity Testing Requirements (Rules 62-761.700, 62-762.701, & 62-762.702, F.A.C.)?	☒	☐	☐
8. Compatible with fuel blends containing >10% ethanol or >20% biodiesel?	☒	☒	☐
9. Has the product been approved or registered in other countries or states? (If so provide list)	☒	☐	☐
10. Any requirements for company-certified installers or trainers?	☐	☒	☐
11. Was this product(s) previously approved or registered by the Department? If yes, EQ- _____	☐	☒	☐
12. Any changes or modifications to the equipment since the last submittal to DEP?	☐	☐	☒

Document Information: Provide supporting documents indicated as "Yes" above including this form via email to Tanknotify@floridadep.gov, or documents can be sent to FDEP, Division of Waste Management, 2600 Blair Stone Road, MS 4560, Tallahassee, FL 32399.

Write a brief description of equipment installation and performance in the U.S.:

Relatively new product, similar to previous 007 model with improvements. The high/low level alarm monitoring system can monitor up to 6 tanks independently and is capable of driving a solenoid valve.

Equipment Registration Certification:

To the best of my knowledge and belief, all information submitted on this form is true, accurate and complete.

Marshall T. Mott-Smith, President, Mott-Smith Consulting Grou
Printed Name and Title

Marshall T. Mott-Smith
Signature (right click to sign)

03/02/2022
Date

For Department Use Only:

Date Application Received: _____ Application complete: Yes: ☐ No: ☐

EQ- Date of complete or incomplete letter sent: _____ Date Equipment Requires Renewal:

Storage tank system equipment requires renewal every 5 years in accordance with subsection 62-761.850(2), F.A.C.

Equipment Registration Application to the Florida DEP Compliance Assistance Program prepared and completed by:

Marshall T. Mott-Smith, President
Mott-Smith Consulting Group, LLC
111 North Calhoun Street
Tallahassee, FL 32301
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850-391-9835 work
850-591-1434 cell
www.mott-smithconsulting.com



Marshall Tipton Mott-Smith

March 2, 2022