

RESOLUTION 17-130

**A RESOLUTION TO AUTHORIZE THE EMERGENCY PURCHASE OF
A HIGH-PRESSURE PUMP AND MOTOR AT THE WATER
TREATMENT PLANT**

WHEREAS, the City of Spring Hill Water Treatment Plant is experiencing mechanical issues with high pressure pump and motor; and

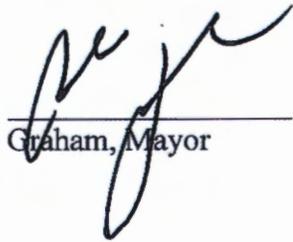
WHEREAS, this equipment is essential for the operation of the plant and must be replaced immediately;

WHEREAS, there is currently a balance of \$30,000.00 in the 2017-2018 fiscal year budget; and

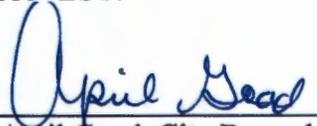
WHEREAS, Section III, Article 3 of the City of Spring Hill Purchasing policy establishes guidelines and authorizes emergency purchases.

NOW, THEREFORE, BE IT RESOLVED, that the City of Spring Hill Board of Mayor and Aldermen authorizes the purchase of a High-Pressure Pump and Motor for the Water Treatment Plant from Anderson Electric in the amount of \$29,703.00, as recommended by city staff, in accordance with the City Purchasing Manual.

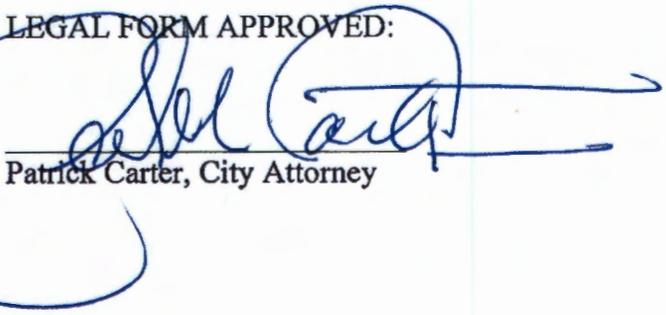
Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee, on the 18th day of December, 2017.


Rick Graham, Mayor

AT EST:


April Goad, City Recorder

LEGAL FORM APPROVED:


Patrick Carter, City Attorney

From: [Victor Lay](#)
To: [April Goad](#)
Subject: FW: WTP Motor Drives
Date: Friday, December 15, 2017 11:25:26 AM

Victor H. Lay, P.E.
199 Town Center Parkway
P.O. Box 789
Spring Hill, Tennessee 37174
Office (931) 486-2252 ext 215
Fax (931) 486-0516

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

From: Philip Stuckert
Sent: Friday, December 15, 2017 10:52 AM
To: Victor Lay <vlay@springhilltn.org>
Cc: Chuck Downham <cdownham@springhilltn.org>; Caryl Giles <cgiles@springhilltn.org>
Subject: FW: WTP Motor Drives

Victor/Chuck

As I mentioned yesterday, we have mechanical issues high pressure pumps/motor problems at the WTP and at the river intake. We have a pump down at the river intake and a pump down at the WTP due to cooling fans not functioning within the NEMA enclosure

Several weeks ago, the phase monitor for one of the pumps/motors at the river intake failed. The phase monitor is part of the motor drive electronic system. We cannot replace just the phase monitors so we are searching for parts to replace the entire drive. A phase monitor steadies the amplitude of the 3 phase electrical current from fluctuating whereby shutting down the motor to the pump. Therefore even though the pump no. 3 can operate, its reliability in times of high demand becomes questionable. We are concerned that we cannot replace the motor control for this pump due to its age. The age of the motor drives are at least 10 to 15 years old. In case we cannot find a replacement motor control unit, Caryl has asked DDA to look into whether it makes sense for us to upsize the pump and motor to 6 mgd rather than 4 mgd which is the current pump rating. As you know we are now looking to expand the WTP due to CPWS indication they will not renew our water sale agreement

We have two pumps down at the WTP. Pump No. 3 is in need of a new motor control unit since its phase monitor has failed. Pump No. 2 dropped offline yesterday due to the heat sensors not activating the cooling fans which then overheated the motor drive. We cannot replace the cooling fan sensors due to their age and that they are part of the motor drive. Therefore since the fans are integrated into the motor drive we have to replace the drive. We have found a new motor drive for pump #2 and wish to purchase it. The new motor drive will allow us to use the existing motor drive from pump 2 for spare parts on pump #3.

The pictures above show the motor drive electric system at the WTP and the three high pressure pumps.

The quote for the new motor drive is \$29,703.00 from Anderson Electric. We have an account balance of \$30,000. If we sign the purchase requisition today the motor drive will arrive by the end of next week.

Caryl

Please let me know if this summary is correct. Thanks.

Philip Stuckert, P.E.
Infrastructure Director
City of Spring Hill, Tn
199 Town Center Parkway
931.486.1265 Ext 487 (d)

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

From: Philip Stuckert
Sent: Friday, December 15, 2017 8:14 AM
To: Philip Stuckert <pstuckert@springhilltn.org>
Subject: WTP Motor Drives

