



## CITY COUNCIL STAFF REPORT

DATE: May 17, 2017

CONSENT AGENDA

SUBJECT: REPORT OF EMERGENCY ENGINE REPAIRS FOR FIRE ENGINE #5  
PURSUANT TO PALM SPRINGS MUNICIPAL CODE SECTION  
7.04.040.

FROM: David H. Ready, City Manager

BY: Department of Maintenance & Facilities

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### SUMMARY

Pursuant to section 7.04.040 (3) of the Municipal Code, on May 11, 2017, the City Manager exercised his authority to approve the emergency repair of Fire Engine #5, unit #1E4409, in the amount of \$38,952.23 by Valley Power Systems, Inc., pursuant to its proposal dated April 20, 2017, to preserve the public's health, safety, and welfare. Section 7.04.040 (4) requires that a written report of the circumstances for emergency purchases in excess of \$25,000 be presented to the City Council at the next regularly scheduled meeting after the emergency procurement is made.

### RECOMMENDATION:

Receive and File.

### STAFF ANALYSIS:

On Tuesday March 4, 2017, the City of Palm Springs Fleet Maintenance Department determined that the vacuum pump, turbo compressor and inner coolant systems needed to be replaced in unit 1E4409. These repairs are specialized and due to the PSFD fire apparatus being leased equipment, the repairs could only be performed by Valley Power Systems. On April 4, 2017, the unit was towed to their facility for repair. Once the mechanics began the repairs, they discovered coolant and engine oil throughout the intake manifold. This discovery will require a rebuild of the engine and replacements of both the vacuum pump and turbo compressor. This unit is a Quantum model 2009, with 92,274 miles. This rebuild and replacement should add five additional years to the life span of this fire apparatus.

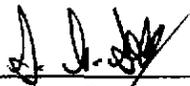
ITEM NO. 1.K.

ENVIRONMENTAL IMPACT:

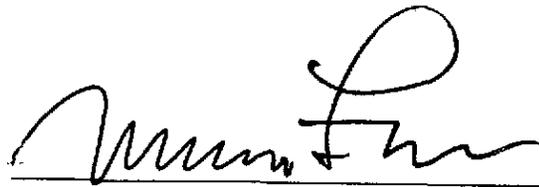
Section 21084 of the California Public Resources Code requires Guidelines for Implementation of the California Environmental Quality Act ("CEQA"). The Guidelines are required to include a list of classes of projects which have been determined not to have a significant effect on the environment and which are exempt from the provisions of CEQA. In response to that mandate, the Secretary for Resources identified classes of projects that do not have a significant effect on the environment, and are declared to be categorically exempt from the requirement for the preparation of environmental documents. In accordance with Section 15301 "Existing Facilities," Class 1 projects consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public structures, facilities, mechanical equipment or topographical features involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. Therefore, in accordance with Section 15301(c), staff determined that repair of Fire Engine #5 was considered categorically exempt from CEQA.

FISCAL IMPACT:

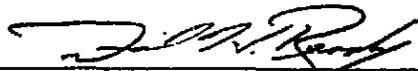
Funds for this emergency repair are available from the 54700 Fleet Operations Fund in account 510-5470-43130.



Staci A. Schafer  
Director of Maintenance & Facilities



Marcus L. Fuller, MPA, P.E., P.L.S.  
Assistant City Manager



David H. Ready, Esq., Ph.D.  
City Manager

Attachments:

1. Quote from vendor
2. Faster Fleet WIN work order #0000017170.

NOT POSTED TO FLEET  
 UPDATED: 04/20/17 01:07 pm PDT



**Valley Power Systems, Inc. - Mira Loma**  
 BAR# ARD179681 EPA# CAO000565390 11300 Inland Avenue Mira Loma,  
 California 91752-1160  
 Phone: (951) 681-9283 - Fax: (951) 681-5516



Case Number: 2190132 - Repair Order Number: R53768  
 Purchase Order Number: n/a  
 Service Writer: Sylvester, Jaime - Case Date: 03/22/17 08:15 am PDT

**City Of Palm Springs**

Unit #:

Address: FLEET MAINTANCE  
 425 NORTH CIVIC  
 palm springs, CA 92264  
 Phone: (951) 454-7096  
 Fax:  
 Cust #: 261103

Asset: 2005 Unknown Unknown Miles: 92,274  
 Serial #: 5A005153  
 VIN: 4P1CU01S15A005153  
 Engine: Unknown  
 Engine Hours: 0



**Complaint:**

Quote for Turbo & inner cooler.

Item	Description	Labor	Parts	Total
1	R&R Inner Cooler	\$930.00	\$0.00	\$930.00
2	Remov oil pan to inspect liners	\$558.00	\$0.00	\$558.00
3	Remove and inspect DOC/DPF replace if needed Parts: (1.0) DOC & DPF CORES, (1.0) DOC MODULE, (1.0) DPF/MODULE, (1.0) clamp, (1.0) clamp, (1.0) gasket, (1.0) gasket, (2.0) CLAMP, (2.0) GASKET	\$372.00	\$9,040.02	\$9,412.02
4	Step Up 3 Parts: (1.0) Basic Overhaul Kit, (1.0) Cylinder Head, (1.0) EGR Cooler, (1.0) EGR Valve, (1.0) Lower Eng Brg Set, (1.0) MISC., (1.0) Oil Pan Gasket, (1.0) Oil Pressure Valve, (1.0) Orange Vakve Cover Gasket, (1.0) RKR ARM KIT, (1.0) Relief Valve, (1.0) Six Pack Injectors, (1.0) Turbo, (1.0) Valve Cover Gasket BLK, (1.0) Water Pump	\$5,115.00	\$19,121.10	\$24,236.10
5	Block Counter Bore	\$0.00	\$0.00	\$1,000.00

**Notes:** [4/4/2017 at 11:56 am PDT] - Unit was checked in at Valley Power Systems, Inc. - Mira Loma, arrival time: 4/4/2017 at 11:55 am PDT. NOTE: UNIT HAS BEEN CHECKED IN AND WILL BEGIN TO PROCEEDS  
 Repair status set to Checked-in.

[4/4/2017 at 11:57 am PDT] - Approval Requested for the estimate version 1, total \$1,712.96. View the estimate. NOTE: WE ARE REQUESTING APPROVAL TO START REPAIRS.  
 Repair status set to Hold (auth).

[4/4/2017 at 12:00 pm PDT] - Yes. We have the green light. All I ask is that if the job is to exceed the quote please let me know so I can get it approved. Thanks. <br> <br> Thank you, Robert Fontes <br> TecIII Fire Mechanic City of Palm Springs Fleet operations 425 N. Civic Dr., Palm Springs, CA 92262 <br> <br> <br> Sent via Email Reply

[4/4/2017 at 12:05 pm PDT] - Please change address and contact to fleet operations and remove wastewater. Thanks. <br> <br> Thank you, Robert Fontes <br> TecIII Fire Mechanic City of Palm Springs Fleet operations 425 N. Civic Dr., Palm Springs, CA 92262 <br> <br> <br> Sent via Email Reply

[4/4/2017 at 12:11 pm PDT] - yes will do.

[4/5/2017 at 08:11 am PDT] - Good Morning Robert - We are currently working on your unit. We will keep you posted as we progress with repairs. Thank you.

[4/5/2017 at 02:33 pm PDT] - Approval Requested for the estimate version 2, total \$3,283.21. View the estimate. NOTE: Found coolant leak coming from coolant hose being poked from wire hose. Needs to replace 1 and half foot of coolant hose with union and new clamps. Also found turbo compressor wheel debris in intake manifold. Needs to remove intake manifold to clean. And also needs to remove oil pan to have access to inspect piston liners for scoring or any damage from compressor wheel debris going thru engine. Also found oil leak at rear of head cam cover. Please see attached revised estimate and let us know if we can continue with repairs.  
 Repair status set to Hold (auth).

[4/6/2017 at 05:50 am PDT] - I am in the process of getting the additional work approved through my director. I will advise when the approval is received. Thank you. <br> <br> Thank you, Robert Fontes <br> TecIII Fire Mechanic City of Palm Springs Fleet operations 425 N. Civic Dr., Palm Springs, CA 92262 <br> <br> <br> Sent via Email Reply

[4/6/2017 at 08:22 am PDT] - Approval Requested for the estimate version 3, total \$3,533.21. View the estimate. NOTE: Also needs to remove and inspect DOC and DPF due to oil found in exhaust/bellow pipe from turbo as progressive damage. We apologize for the inconvenience but these are items we have found as we progress with repairs. Thank you. Please see revised estimate.  
 Repair status set to Hold (auth).

[4/13/2017 at 11:45 am PDT] - Good Morning Robert - Just following up on the repair estimate sent to you. Please let us know if you have any questions. Thank you.

[4/14/2017 at 07:20 am PDT] - Good Morning Robert - Just following up on the repair estimate sent to you. Please let us know if you have any questions. Thank you.

[4/17/2017 at 10:14 am PDT] - Good Morning Robert - Just following up on the repair estimate sent to you. Please let us know if you have any questions. Thank you.

[4/18/2017 at 08:02 am PDT] - Good Morning Robert - Just following up on the repair estimate sent to you. Please let us know if you have any questions. Thank you.

[4/18/2017 at 12:01 pm PDT] - The removal of the oil pan for inspection has been approved. Please proceed with the repair

<b>Parts:</b>	\$28,161.12
<b>Labor:</b>	\$6,975.00
<b>Haz:</b>	\$0.00
<b>Waste:</b>	
<b>Shop:</b>	\$563.22
<b>Freight:</b>	\$0.00
<b>Tax:</b>	\$2,252.89
<b>Travel</b>	\$0.00
<b>Charges:</b>	
<b>TOTAL:</b>	<b>\$38,952.23</b>

Dealer: Valley Power Systems, Inc. - Mira Loma - Fleet: City Of Palm Springs - Unit: n/a - Asset: 2005 Unknown Unknown - S/N: 5A005153

WARRANTY INFORMATION: WARRANTY ON NEW ENGINES, NEW TRANSMISSIONS, NEW AND REBUILT PARTS, reliable ENGINES, reliable ASSEMBLIES, reliable PARTS AND UTEX PARTS IS LIMITED TO THE MANUFACTURER'S WARRANTY. SHOP LIABILITY SHALL BE LIMITED TO THE CORRECTION OF THE REPAIRS PERFORMED WHEN VALLEY POWER SYSTEMS, Inc. or any of its subsidiaries (herein to refer to as "VALLEY") EXAMINATION SHALL DISCLOSE FAULTY WORKMANSHIP UNDER NORMAL USE WITHIN 180 DAYS FROM THE DATE OF DELIVERY. VALLEY 's SOLE OBLIGATION UNDER THIS WARRANTY IS TO REPAIR, AT ITS PLACE OF BUSINESS OR, AT ITS OPTION EXCHANGE ANY SUCH GOODS OR SERVICES WHICH ARE FOUND BY VALLEY TO BE DEFECTIVE IN WORKMANSHIP OR MATERIAL, FOR reliable assemblies. THIS IS LIMITED TO REPAIRS OR REPLACEMENT OF THE FAILED reliable COMPONENTS ONLY. THE FOREGOING SHALL BE THE SOLE AND EXCLUSIVE REMEDY FOR ANY SUCH DEFECT, WHETHER IN CONTRACT, TORT, WARRANTY OR OTHERWISE, IN NO EVENT SHALL VALLEY BE LIABLE FOR ANY INDIRECT, SPECIAL INCIDENTAL OR CONSEQUENTIAL DAMAGE, INCLUDING TOWING OR DOWN TIME IN CONNECTION WITH, OR ARISING OUT OF THE SALE OF GOODS OR FURNISHINGS SERVICES. THESE WARRANTIES ARE ONLY APPLICABLE WARRANTY AND ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, UNLESS OTHERWISE EXPRESSLY SPECIFIED HEREIN.

CUSTOMER RESPONSIBILITY FOR NON-WARRANTY REPAIRS: IN SOME INSTANCES, CERTAIN OF THE REPAIRS REQUESTED BY YOU MAY HAVE THE POSSIBILITY OF BEING COVERED BY A MANUFACTURER'S WARRANTY, IN SUCH INSTANCES, VALLEY MAY, AS AN ACCOMMODATION TO YOU, FILE WARRANTY CLAIM ON YOUR BEHALF AND DEFER BILLING YOU UNTIL THE MANUFACTURER HAS RESPONDED TO THE WARRANTY CLAIM. HOWEVER, ANY AMOUNTS NOT PAID BY SAID MANUFACTURER WILL BE BILLED TO YOU AND WILL BE DUE UPON RECEIPT OF INVOICE.

I HEREBY AUTHORIZE THE ABOVE REPAIR WORK TO BE DONE ALONG WITH INSTALLATION OF THE NECESSARY MATERIAL, AND HEREBY GRANT VALLEY AND/OR ITS EMPLOYEES PERMISSION TO OPERATE THE VEHICLE OR PRODUCT HEREIN DESCRIBED ON STREETS, HIGHWAYS OR ELSEWHERE FOR THE PURPOSE OF TESTING AND/OR INSPECTION. AN EXPRESS LEAN IS HEREBY ACKNOWLEDGED ON THE VEHICLE OR PRODUCT TO SECURE THE AMOUNT OF THE REPAIRS THERETO. I ALSO ACKNOWLEDGED THAT THE REPAIRER IS NOT RESPONSIBLE FOR LOSS OR DAMAGE TO ARTICLES LEFT WITH VEHICLE OR PRODUCT IN CASE OF FIRE, THEFT OR ANY OTHER CAUSE BEYOND ITS CONTROL, AND IT'S NOT RESPONSIBLE FOR MATERIAL UNCLAIMED AFTER 30 DAYS. I ALSO ACKNOWLEDGE AND ACCEPT THE TERMS OF THE WARRANTY INFORMATION SHOWN ABOVE.

DATE: \_\_\_\_\_ SIGNED: X \_\_\_\_\_

WO Company:001 City Active Fleet  
 WO Department:001-3520 FIRE DEPARTMENT  
 WO Shop:HDS HEAVY DUTY SHOP

CUSTOMER COPY



**WO#: 0000017170**  
 Date In: 03/14/2017 10:19  
 Date Out: 00:00  
 WO Total Cost: 10563.80  
 WO Status: V Last WO#:0000017170  
 Bill Code: A Last WO Date: 03/14/2017  
 Operator: JM

Equipment: 1E4409 License: 1315662

Color: White Engine: Series 60  
 Year: 2009 GVW: 39520  
 Make: PIERCE Serial: 4P1C001H29A010100  
 Model: Quantum Misc. Field:  
 Location:

Department: 001-3520:FIRE DEPARTMENT  
 Class: 8753:"> 33,000 GVW, STRAIGHT TRUCKS, FIRE APPARATUS, PUMPER"  
 Company: 001 City Active Fleet  
 Monitor Group: RF:Replacement funded  
 Site: F55:Fire Station 5

METERS

WO Meter	Reading	Override?	Eq Meter	Actual	LTD
K	8464		H	8464	8464
M	92274		M	92274	92274

PM SERVICE

Due	Type	Type Description
08/04/2017	B	PM PER LIST

REPAIRS PERFORMED

MID	Date	SH	RTY	Description	Labor Cost
15746	04/04/2017	N	PMB BS	PM Service   PM B Service Li	1.18
15746	03/30/2017	N	PMB BS	PM Service   PM B Service Li	687.06
15746	03/29/2017	N	PMB BS	PM Service   PM B Service Li	867.59
15746	03/28/2017	1	PMB BS	PM Service   PM B Service Li	722.50
15515	04/03/2017	N	2000001020BS	General Repair   Unit Services   Complete Unit   Inspect	0.40
15515	03/14/2017	N	2000001020BS	General Repair   Unit Services   Complete Unit   Inspect	1.53
15515	03/14/2017	N	2000001020BS	General Repair   Unit Services   Complete Unit   Inspect	1.75
15515	03/14/2017	N	2000001020BS	General Repair   Unit Services   Complete Unit   Inspect	202.77

SUBLET REPAIRS

Vendor	Date Back	RTY	RTY Description
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PARTS ISSUED

Strm	Part Number	Part Description	RTY	RTY Description	QTY	Unit Cost	Total Cost
1	03-1-3418	FUEL FILTER	PMF BS	PM Service   Fuel Filter	1	25.08	25.08
1	01-3-1971	FILTER OIL -PIERCE LADDER TRUCKS	PMB BS	PM Service   PM B Service Li	2	19.92	39.84
1	02-3-3120	FILTER FUEL SEC	2044F15100BS	General Repair   Fuel System   Filter Fuel Pri   Replace	1	8.71	8.71
1	40wt	OIL	PMB BS	PM Service   PM B Service Li	36	3.09	111.20
1	H0ATF	HEAVY DUTY AFT 55GAL DRUM	PMB BS	PM Service   PM B Service Li	2	7.96	15.92
1	WA10116	WIX AIR FILTER	2041F10100BS	General Repair   Air Intake Engi   Filter Air   Replace	1	129.48	129.48
1	K080384	SERPENTINE BELT	2045B2L100BS	General Repair   Engine Block	1	26.95	26.95

PARTS ISSUED							
Strm	Part Number	Part Description	RTY	RTY Description	QTY	Unit Cost	Total Cost
1	01-3-5500	TRANS TWIN FILTER KIT -FIRE TRUCK	PMT BS	Belt Serpentine   Replace PM Service   Trans Filter	1	77.09	77.09
1	29557354	VALVE ASSEMBLY	20325FD100BS	General Repair   Cranking System   Solenoid Starte   Replace	1	321.49	321.49
1	11r225	TIRE XZE	2017TM3100BS	General Repair   Tire / Tube   Tire Light   Replace	4	552.08	2208.31
1	31E23539571	turbocharger	2043A06100BS	General Repair   Exhaust Engine   Turbocharger As   Replace	1	4679.45	4679.45
1	PIE-1452878-0001	2 in PSI GAUGE	2109MP2150BS	General Repair   Fire Suppressio   Monitor Fire Sy   ReplaceFastener	3	144.58	433.75

MISCELLANEOUS COSTS				
Code	Code Description	RTY	RTY Description	Misc. Cost
Fixed	Shop fee	ZN00E5S255BS	Invalid RTY Group code	1.75

CREDITS		
Date	Description	Credit Amount

**Work Order Total: 10563.80**

Parts: 8077.27	Labor: 2484.78	Sublet: 0.00	Misc Cost: 1.75	Credit: 0.00
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**NOTES**

**Problems**

1- pm-b  
Today the following was noted prior to E-445 going out of service: ( Unit 1E4409 )

- 1.) The driver side headlight turns off when high beams are engaged.
- 2.) Passenger side windshield wiper not functioning properly.
- 3.) Cross lay #1 discharge gauge no longer secures to pump panel and is dangling onto the handles but is still operational.
- 4.) Front and rear A/C blows hot air. (RV A/C still functioning properly)
- 5.) On the way to a call, after approximately 2 miles of response, the motor began to overheat steadily rising to 230° and the check engine light came on.
  - a. The unit cooled adequately on scene and "check engine" cleared. No Regen required on this occasion.
  - b. Temperatures rose upon normal city driving when the retarder was engaged. All fluids checked and no abnormalities found.
- 6.) Later during the same day as the overheat issue a loud thud/pop was heard and felt in the cab while driving. An immediate drastic loss of power occurred and check engine light came on again. The unit was able to be slowly driven back to the city shops.

03/28/2017 @ 06:38:44

1. Perform PM-B Replace engine oil and filters, trans filter, fuel filters, air filter, pump gear box oil, check rear axle oil-OK.
2. Repair fan clutch. Remove fan/clutch assy and replace air fitting and hose.
3. Replace alternator belt.
4. Replace faceplates, pump panel-3 with decals
5. Replace trans brake valve
6. Repair wiper motor mount
7. Repair washer fluid line

04/04/2017 @ 11:36:59

send to vendor for turbo and intercooler repair- Valley power

Initial diagnosis performed by Fleet. Turbo and Intercooler bad. Needs replaced. Sent to Valley Power Systems as they are the Detroit dealer for repairs made to the unit.

Upon replacement of the turbo and intercooler, Valley found debris to have entered into the intake manifold. The second quote is for inspection and replacement of damaged parts from the Turbo coming apart. The oil pan needs to be removed and the cylinder walls inspected, the intake manifold needs to be removed so the intake chamber can be cleaned and inspected, the EGR cooler needs replaced due to oil contamination from the turbo coming apart, and the DPF filter which burns off excess emissions needs replaced due to oil contamination.

WA10116 (WIX Filter) ordered from O'Reillys -reference invoice # 4665-222434

PIE-1452878-0001, southcoast, invoice 484230