

December 10, 1971

J. C. DUER

R. HOWELL

HEATING SYSTEM, BLDG. 848

The two hot air furnaces at building 848 were installed on MO 192-2601-1. Department 22, Space Heating, completed their part of the installation on 9-1-71.

The #2 Fuel Oil for the furnaces was supplied from a 550 gallon buried tank on the east end of building 848. When the installation was completed, it was found that the two furnaces would not operate at the same time due to one furnace taking the oil from the second unit's oil supply.

On October 18, 1971, a small holding tank with pump and an electric cut-off switch was installed to insure a positive fuel supply to both furnaces. The holding tank was equipped with a 1/4" vent and/or overflow line extending through the north wall of the furnace room to the north ramp.

These heating units are checked twice daily, Monday thru Friday of each week. During the Thanksgiving Holiday weekend, these units were checked twice on Friday November 26 and were in perfect working order. The last inspection was at approximately 2 PM by B.L. Siddens, Furnace Boiler Mechanic.

Since there are no Space Heating Personnel scheduled for Saturday and Sunday, the next check was made shortly after 8 AM on Monday November 29, 1971 by J. Goodyear. Mr. Goodyear found the auxiliary tank pump running and #2 Fuel Oil on the north ramp of building 848. The 550 gallon oil supply tank was practically empty since it required 544 gallons to refill the tank.

It was determined that the electric cut-off switch failed at some time between 2 PM Friday November 26 and 8 AM Monday November 29, 1971, permitting the auxiliary pump to continue to run, with the result that approximately 400 gallons of #2 Fuel Oil were pumped onto the ramp and on the ground north of building 848. The ground was frozen at that time due to minimum temperatures of 24°, 10° and 14° on November 22 thru November 24 which also recorded a total of 7 1/2" of snow fall.

FUEL OIL DELIVERIES

10-18-71	65 Gallons
11- 1-71	55 Gallons
11- 8-71	191 Gallons
11-16-71	250 Gallons
11-18-71	50 Gallons
11-19-71	15 Gallons
11-22-71	26 Gallons
11-24-71	111 Gallons
11-29-71	544 Gallons

TO: J. C. DUER
FROM: R. HOWELL
SUBJECT: HEATING SYSTEM, BLDG. 848

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AIR TEMPERATURE

	<u>Mean Average</u>	<u>Minimum</u>
11-16-71	53°	35°
11-17-71	42°	28°
11-18-71	46°	29°
11-19-71	51°	34°
11-20-71	Weather Station not operated.	
11-21-71	Weather Station not operated.	
11-22-71	32°	24°
11-23-71	22°	10°
11-24-71	23°	14°
11-25-71	Weather Station not operated.	
11-26-71	Weather Station not operated.	
11-27-71	Weather Station not operated.	
11-28-71	Weather Station not operated.	
11-29-71	33°	27°

The heavy rains of the week ending December 5, 1971 and December 6, 7, 8, and 9 of the current week caused the mixture of water and #2 Fuel Oil to enter the storm sewer along the north side of building 848. Precipitation during this period totaled 4.37 inches.

An above ground fuel tank was installed on December 9, 1971 to provide gravity flow to the furnaces, and the holding tank and pump were removed on December 10, 1971.

R. Howell

RH:n1

cc: File (2)