



**HEATING SYSTEM OPERATION,
MAINTENANCE, AND ADMINISTRATION BOOKLET**

SEPTEMBER 2019

**SEE PAGE 10 FOR THE PROCEDURE TO FOLLOW IF
YOU DO NOT HAVE HEAT**

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HEATING SYSTEM – GENERAL OVERVIEW

The operation, maintenance, and administration of the heating system is a very important matter that each Association member/resident needs to understand. By knowing how the system works, you will be able to achieve a comfortable and warm living environment at a reasonable cost.

Townhouse Units

The townhouse units (23 units with a garage), have their own individual oil-fired burners and oil tanks. These unit owners do not rely on the Association's heating system and do not receive monthly invoices from the Association for the delivery of heat to their unit. Townhouse units are located at 8-1, 8-2, 8-3, 8-4, 8-5, 8-6, 8-7, 8-8, 9-1, 9-2, 9-3, 9-4, 9-5, 9-6, 9-7, 10-1, 10-2, 13-1, 13-2, 13-3, 13-4, 14-1, and 14-2.

Townhouse unit owners/residents should have their oil furnace systems checked at least once each year. The air filter in the furnace should be checked every two (2) months and replaced as needed. If your system has a humidifier installed on the furnace, it should be checked at least once each year.

Townhouse unit owners are fully responsible for the purchase, installation, operation, and delivery of oil to their privately owned heating systems. They may contract these activities through any contractor of their choice. The remaining 165 units share a boiler with other surrounding units.

Units Serviced by Association Boilers

There are a total of 25 boilers that serve the remaining 165 units. The number of units that share a common boiler range from as few as three (3) to as many as ten (10). The boilers vary in size to accommodate the number of units that are connected to the same heat source. A list of the specific boiler that services each unit can be found on the chart on the next page.

UNITS SERVICED BY ASSOCIATION BOILERS

BOILER ROOM NO.	UNITS SERVICED									
M-1	1-1	1-2	1-3	1-4	1-5	1-6	1-7	1-8		
M-2	2-1	2-2	2-3	2-4	2-35	2-36	2-37	2-38		
M-3	2-5	2-6	2-7	2-8	2-31	2-32	2-33	2-34		
M-4	2-9	2-10	2-29	2-30						
M-5	2-11	2-12	2-13	2-26	2-27	2-28				
M-6	2-14	2-15	2-16	2-23	2-24	2-25				
M-7	2-17	2-18	2-19	2-20	2-21	2-22				
M-8	3-1	3-2	3-3	3-4	3-13	3-14	3-15	3-16	3-17	3-18
M-9	3-5	3-6	3-7	3-8	3-9	3-10	3-11	3-12		
M-10	4-5	4-6	4-7	4-8	4-9	4-10				
M-11	4-4	4-11	4-12							
M-12	4-1	4-2	4-3	4-13	4-14	4-15				
M-13	5-13	5-14	5-15	5-16	5-17	5-18				
M-14	5-7	5-8	5-9	5-10	5-11	5-12	5-19	5-20	5-21	
M-15	5-1	5-2	5-3	5-4	5-5	5-6				
M-16	6-1	6-2	6-3	6-10	6-11	6-12				
M-17	6-4	6-5	6-6	6-7	6-8	6-9				
M-18	7-1	7-2	7-3	7-19	7-20	7-21	7-22	7-23		
M-19	7-4	7-5	7-6	7-7	7-14	7-15	7-16	7-17	7-18	
M-20	7-8	7-9	7-10	7-11	7-12	7-13				
M-21	11-7	11-8	11-9	11-10	11-11	11-12				
M-22	11-4	11-5	11-6	11-13	11-14	11-15				
M-23	11-1	11-2	11-3	11-16	11-17	11-18				
M-24	12-4	12-5	12-6	12-7	12-8	12-9				
M-25	12-1	12-2	12-3	12-10	12-11	12-12				

How Boilers Work

The boilers heat water that is circulated to each unit. The water then runs through a heating coil (heat exchanger). In the heat exchanger, a large fan draws in cooler, indoor air through a filter and blows this air to the heating coil. The heated air continues to circulate through the duct system to the various rooms, from which it returns to the heat exchanger through return ducts thus completing a circuit.

The units with a common boiler have a heat valve that regulates the flow of hot water from the main hot water pipe to each unit's heating coil. The heat valve (commonly referred to as a "zone valve") is opened only when the unit's thermostat calls for heat. The heat valve (zone valve) is monitored by an elapsed time meter located inside the boiler room, which measures the elapsed time of usage by each unit for billing purposes.

Heat Transfer Between Adjoining Units

Each resident shares common walls, ceilings, and floors with their neighbors. Generally speaking, ground floor and northern exposure units are cooler than upstairs units with a southern exposure. These locations cause heating expenses to be higher in winter, but conversely, cooling expenses will be lower in summer. One would also find that heating expenses will be higher in units that have several unoccupied adjoining units that do not contribute heat for the benefit of the neighboring units, but do absorb heat from the occupied units. One benefit of condominium living is that an adjacent unit generally provides a higher "R" value for insulation than would an exterior wall.

THERMOSTAT CONTROL

Each unit's temperature is controlled by a centrally located thermostat within the unit that has four operative switches.

1. The clear face plate can be turned clockwise to select a higher or lower temperature. The actual room temperature is shown on the bottom temperature scale.
2. On the top of the thermostat are two levers. The left one can be set in any one of three positions – COOL, OFF, or HEAT. COOL activates the air conditioning system. OFF deactivates any temperature control. HEAT activates the heating system. **The elapsed time meter registering the opening of the heat valve and flow of hot water to the heat coils in the boiler rooms will commence when this lever is in the HEAT position and the thermostat setting calls for heat.**

To save energy and to reduce your heating cost, sensors have been installed at each boiler which will automatically shut down the boiler when outside temperatures exceed 70 degrees.

You control your cost for "space heating" by properly operating your thermostat.

3. The other lever on the top right of the thermostat regulates the operation of the fan. With this lever in the ON position, the fan runs regardless of the temperature desired or requested. (This is useful just to circulate the air within the unit without any heating or cooling from the heat exchanger). The heat valve ("zone valve") time elapse meter does not run when the fan is in the "ON" position. With the lever in the AUTO position, the fan will turn on and off automatically when either warm or cool air is necessary to adjust the temperature of the room to the desired level.
4. Concealed beneath the gold colored rim of the thermostat is another control lever. This lever regulates how quickly the thermostat anticipates calling for heat. When set on a lower number, heat is turned on within two or three degrees of the requested temperature setting resulting in more heating cycles per hour. When set on a higher number, the heat is turned on in 5 or 6 degrees of the requested temperature setting resulting in fewer heating cycles per hour. The user may adjust the thermostat to reach the most desirable heating cycles per hour for personal comfort.

HEAT BILLING

The oil and maintenance of the boilers for the 165 units that are connected to the central boiler heating system is provided by an oil supplier selected by Council. The Association has negotiated a contract that typically offers a discount from normal retail rates due to our large buying power. The residents in the townhouse units may use any supplier or maintenance company of their choice.

The Condominium Association therefore is fully responsible for the ultimate payment of oil and maintenance bills for the 165 units that rely on the central boiler heating system. It is only through this guarantee of payment that any oil company will supply the complex. Therefore, it is essential that all residents understand that these bills are legal obligations of the Association as well as each unit owner. These invoices will be enforced for full payment, if necessary, to recoup the Association's funds if delinquent. Specific resolutions and amendments to the Code of Regulations have been passed drawing direct liability regarding oil billing, as well as legal fees, delinquent fees, and similar costs.

Billing System:

At the start of the heating season and on the day the boilers are turned on (approximately October 1), a reading is recorded on each of the 165 elapsed time meters located in each boiler room. On approximately the tenth of each successive month (November 10 thru May 10), a reading is recorded on each of the 165 elapsed time meters and the 25 oil tanks are filled with oil by the supplier. The difference between the two elapsed time readings is the time used by each unit for that heating period. The amount of oil that was used to fill each boiler is also recorded. With this information, the following charges are billed;

"SPACE" = The unit's elapsed time multiplied by the per minute cost to provide oil, based on the per gallon price. This cost may increase or decrease each year depending on the contract price of oil.

"BASE" = The difference between the total oil bill for filling the 25 tanks and the total "SPACE" bill, which is divided by 165 units. Each unit is charged the same amount for "BASE" for "heat on demand". While a hot water system is an efficient method of heat transfer in a large shared system, it also requires that a certain heat capacity be expended in providing "heat on demand" (standby heat). For days where there is little or no demand for heat, the boilers continue to heat circulating water, although at a lower rate. The charge for this "heat on demand" is shared by all 165 users. The charge for "BASE" is normally higher in the first and last heating periods as daytime temperatures in October-November, and April-May are times of the year when less heat is used.

"FEE" = \$32.00 per month for seven (7) months (\$224.00 per unit per year), levied to cover boiler and system maintenance, to run the boilers. This charge is reviewed annually by Council and may increase or decrease accordingly.

Your bill is therefore based on the following calculation:

$$\mathbf{"SPACE" + "BASE" + "FEE" = TOTAL BILL}$$

FACTORS THAT AFFECT THE COST OF YOUR HEATING BILL

Contractual Price of Oil for the Season

Through a competitive bidding process and before the boilers are activated, Council selects a qualified oil delivery company to supply the community with #2 heating oil for the heating season.

It has been Council's experience over many years that by purchasing heating oil on the future's market, that unit owners will typically realize a savings of up to 20 percent on the price of oil as compared to paying the market price each time that oil is delivered. Based on oil consumption, Council enters into a contract with an oil supplier to provide a set amount of oil for the season at an agreed upon price. This not only saves you money, but provides stability for the price of oil on each month's billing statement.

Since 1999, the price of oil per gallon has varied from as low as .729 cents per gallon, to as high as \$3.519 a gallon. This wide variation in price is a reflection of the volatility of the worldwide oil market, which lies completely outside the scope and control of Council. Council makes every effort to obtain the lowest possible price for oil that is commercially available.

THE CONTRACTUAL PRICE OF OIL FOR THE SEASON REPRESENTS THE GREATEST FACTOR THAT DETERMINES THE COST OF YOUR OIL HEATING BILL.

Temperature Setting of Your Thermostat

The lower that you set your thermostat, the less time the thermostat will call for heat to be supplied to your unit. When you set your thermostat to a higher temperature, heat will be provided to your unit more often.

You have complete control of your thermostat, which directly affects the "space" heating component of your bill.

In comparing monthly usage and heating bills, there is a wide variation in "space" heating that is used by each unit. This is a direct result of each resident's temperature preference. The temperature that you set your thermostat has a direct effect on the cost of your oil heating bill.

Unit Owner Maintenance of the Thermostat and Diverter - Zone Valve

In accordance with the Code of Regulations, Article XIV, Section 4, "The owner of any condominium unit shall, at his own expense, maintain his condominium unit and any and all equipment, and its appurtenances in good order, condition, and repair. The owner of any condominium unit shall, at his own expense, maintain, repair, and replace any heating equipment that may be in or declared to be appurtenant to such Condominium unit."

In accordance with the Association's documents, it is the Association's duty to properly maintain, repair, and replace each boiler, oil tank, and remote timer that serves the central boiler heating system. Every effort is made by Council to ensure that the boilers are properly serviced and maintained, and that the remote timers which record the time that the thermostat inside your unit is calling for heat are working properly.

The heating system inside your unit is comprised of a thermostat, a wire that leads from the thermostat to the remote timer inside each boiler room, an air handler, and a diverter valve (zone valve). If your thermostat malfunctions and needs to be replaced, the replacement of the thermostat is the responsibility of the unit owner. In the event that the wire that connects from the thermostat to the remote oil timer is not properly connected at the thermostat, the unit owner is responsible for the repair. If the air handler (which interacts with each unit's air conditioning system) is not working properly, it is the unit owner's responsibility to perform the proper repair. The diverter valve (zone valve) is the mechanism inside the air handler which opens and closes, which calls for heat to be provided to the unit. In the event that the diverter valve (zone valve) malfunctions, it is the unit owner's responsibility to promptly and properly perform the repair.

It is strongly recommended that each unit owner, on a periodic basis, have the heating system inside their unit checked to ensure that all components of the heating system are working properly. This inspection should be conducted between October 1 - May 10, when the heating system is activated.

Problems may arise with your thermostat when the thermostat fails to provide heat when the proper setting is made. Problems may occur with the air handler or the diverter valve (zone valve) when the thermostat is in the proper setting, but little or no heat is being provided. Difficulties may arise with the diverter valve (zone valve) when the diverter valve malfunctions in the "open" position. This will result in very high heating bills.

If you experience sudden and unusually high heating bills, you should contact a qualified technician to examine the heating system inside your unit, as the problem could be a diverter valve (zone valve) that is stuck in the "open" position.

Original Unit Owner Heating Systems Are Nearing the End of Their Useful Life

Most of the heating systems in the Chestnut Grove community were installed by the builder in 1980. Since these systems have serviced the community for several decades, it is likely to assume that the majority of the heating systems within the units are nearing the end of their useful life. To ensure that you have a reliable source of heat, Council encourages each unit owner to diligently monitor the heating system within their unit and to perform repairs in a prompt manner.

The factors that affect the cost of your heating bill are:

PRICE OF OIL	+	THERMOSTAT SETTING	+	UNIT OWNER MAINTENANCE	=	FACTORS THAT AFFECT HEATING BILL
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HEATING SYSTEM CALENDAR

<u>DATE (On or About)</u>	<u>ACTIVITY</u>
October 1	Heat is turned on to the 25 boilers on the central boiler heating system (M-1 through M-25).
November 10	Meter reading, oil delivery, and invoices mailed to 165 unit owners.
December 1	Oil heating bill due (for the period of Oct. 1 - Nov. 10).
December 10	Meter reading, oil delivery, and invoices mailed to 165 unit owners.
January 1	Oil heating bill due (for period of Nov. 10 - Dec. 10).
January 10	Meter reading, oil delivery, and invoices mailed to 165 unit owners.
February 1	Oil heating bill due (for period of Dec. 10 - Jan 10).
February 10	Meter reading, oil delivery, and invoices mailed to 165 unit owners.
March 1	Oil heating bill due (for period of Jan. 10 - Feb 10).
March 10	Meter reading, oil delivery, and invoices mailed to 165 unit owners.
April 1	Oil heating bill due (for period of Feb. 10 - Mar 10).
April 10	Meter reading, oil delivery, and invoices mailed to 165 unit owners.
May 1	Oil heating bill due (for period of Mar. 10 - April 10).
May 1	Meter reading, oil delivery, and invoices mailed to 165 unit owners. Heat is turned off to the boilers on the central boiler heating system (M-1 through M-25). Meters are read and oil is delivered for the next heating season.
June 1	Oil heating bill due (for period of Apr. 10 - May 10).

QUESTIONS AND ANSWERS:

When does the bill go out?----- The 10th of the month.
When is the bill due?----- The 1st of the following month.
When is the bill delinquent? ----- The 15th of the following month.
What is the late charge?----- \$25.00 (See Resolution #8 for details).

Why did I get a bill when my thermostat was turned off?

"SPACE" + "BASE" + "FEE" = TOTAL BILL

"SPACE" is calculated based on the time that your thermostat is calling for the boiler to provide heat to your unit. After the heating system is turned on for the season, you will receive a monthly bill until the system is turned off (around May 1st). If your thermostat was turned off, you will still be billed for "BASE" (heat on demand) and "FEE" (maintenance of the boiler).

I am a renter. Why isn't the bill sent to me?

Each unit owner is legally responsible for all charges assigned to their unit. If the landlord requires that the renter pay the heating bill and you do not receive your oil bill by the 20th of the month, you should contact your landlord, or the Office Manager at Continental Property Management, Inc., at (215) 343-1550.

I rent my unit. Why did I get a bill?

Each unit owner is legally responsible for all charges assigned to their unit. Since your tenant will not receive a bill from the Association, you should make arrangements to make sure that the bill is paid by the 1st of the following month.

I am a unit owner and I did not get a bill. What should I do?

Each meter is read on the 10th of the month and an invoice is mailed to each unit owner. If you do not receive your invoice by the 20th of the month, please contact the Office Manager at Continental Property Management, Inc., at (215) 343-1550.

I think that the amount of my bill is wrong. What should I do?

Your bill is calculated on information generated from the timers, the oil company, and from maintenance that is required to operate the system. This information is fed into a computer program that creates your bill. Each bill is reviewed by the Accounting Department and the Property Manager to ensure accuracy before the bill is mailed to you. Every effort is made to provide you with an accurate bill. If, however, you feel that an error has been made, please write a letter explaining why your bill is wrong to:

Eric Lindbloom, Property Manager
CHESTNUT GROVE CONDOMINIUM ASSOCIATION
975 Easton Road, Suite 102
Warrington, PA 18976
Fax: (215) 491-5620

Please provide as much information as possible to substantiate your claim. Upon receipt of your letter, an audit will be conducted of your oil heating account.

PROCEDURE TO FOLLOW IF YOU DO NOT HAVE HEAT

Follow this Checklist:

- 1. Make sure that your thermostat is set correctly.**
- 2. Make sure that your circuit breakers are in good working order.**
- 3. Open your heating unit closet and check the pipes to see if they are hot when touched. If the pipes are hot, the boiler for your unit is delivering heat and the problem lies within your unit.** Since the maintenance of all heating equipment within the unit is the direct responsibility of each unit owner, you will need to contact a qualified contractor. Brinker's Fuels, Inc. (215-348-2670) is one service contractor that is familiar with our heating units. You may select any qualified contractor of your choice to service the heating system inside your unit.

Tenants should call the unit owner or the owner's agent. Landlords should provide their tenants with a key to the heating closet.

- 4. If the pipes are cold, a boiler problem is indicated. If possible, check with neighbors using the same boiler to see if they might have the same problem.**

**CALL BRINKER'S FUELS, INC. DIRECTLY AT
(215) 348-2670 OR (215) 343-0660
TO REPORT THE PROBLEM. THEIR SERVICEMEN ARE
AVAILABLE 24 HOURS A DAY, SEVEN DAYS A WEEK.**

**Please do not call Continental Property Management, Inc. or any
Council member with a heating related emergency, as this will only
delay the arrival of a serviceman to your unit.**

If Brinker's Fuels, Inc. finds that the problem is with the boiler, the repair will be performed at the cost of the Association. If the problem is within your unit, Brinker's will perform the repairs subject to your authorization.

ADMINISTRATIVE RESOLUTION #8

COMMON EXPENSE ASSESSMENT AND OTHER FEE PROCEDURES INSUFFICIENT CHECK PROCEDURES

WHEREAS, Article 1, Section 1, Paragraph (F) of the Declaration creating Chestnut Grove provides for a Council which shall manage the business, operation, and affairs of the property, and

WHEREAS, Article V, Section 3b of the Code of Regulations establishes Council's power for the determining, assessment and collection of funds, and delinquent funds for Common Expenses; and

WHEREAS, Chestnut Grove Council of Unit Owners wishes to clearly define the administration procedures to carry out the collection of any such delinquent assessments:

NOW THEREFORE BE IT RESOLVED THAT:

1. All monthly condominium assessment fees, oil bills, fines, and any other charges owed Chestnut Grove Condominium Association are due by the first day of the applicable month. The amount owed that is not received by the fifteenth (15th) of the month shall be termed delinquent. On the sixteenth (16th) of each month, a delinquent fee of twenty-five dollars (\$25.00) will be automatically added without notice to EACH delinquent fee. Any Condominium Unit with a balance over thirty (30) days, including late charges, fines, etc., will be charged an additional twenty-five dollars (\$25.00) each month until the account is current. All late fees will be added automatically to every delinquent account without notice.
2. Those fines levied by Council where a date that Council assigns has not been met for such things as painting doors, painting and repairing fences, painting and repairing porch railings, keeping patios according to the rules, etc., will be added to the monthly amount owed and will be subject to the monthly collection dates and fees noted in paragraph number one above. If this type of violation has not been corrected within four (4) weeks from the date assigned by Council, no further weekly fine will be added. Council will have the violation corrected, and the owner will be billed for the work, all of which will be added to the monthly amount owed per paragraph one above.
3. On the next monthly billing, any delinquent Unit Owner shall be notified of any past due status. The notices shall reflect the amount due plus delinquent fee charges. Failure to give notice shall in no way relieve the Unit Owner of an obligation to pay.
4. No Unit Owner shall be eligible to vote, either by person or by proxy, who is shown on the books to be more than thirty (30) days delinquent in any payment.

5. When any Unit Owner carries a delinquent status equal to at least two hundred fifty dollars (\$250.00), a letter shall be sent by certified mail in advance of the next Council meeting advising him/her that the Council will take one of the following actions at the time of the next Council meeting, providing the Unit Owner has not paid in full by the time of that Council meeting.
 - 5.1 Council shall accelerate payments of the remaining monthly installments for the fiscal year, including any other amounts owed. The entire amount shall become due and payable immediately.
 - 5.2 Institute legal proceedings for the collection of the entire amount due, including accelerated payments and, as provided by law, all related charges for collection of the delinquent account, court and legal costs, late fees, collection expenses, and delinquency charges, or
 - 5.3 As provided by the Declaration, Code of Regulations, and respective Amendments thereto, place a lien on the subject property.
6. Council may exercise any and all of its rights permitted by law and may include public notice of the delinquent status of any Unit Owner at any time.
7. All insufficient fund checks will be considered as a late fee assessment and will have an applicable delinquent fee charged plus a \$25.00 insufficient check charge applied to the Unit Owner's account.
8. This Resolution is applicable, without exception, to all Unit Owners and all Units.