



CITY OF SACRAMENTO

46 #

CITY MANAGER'S OFFICE
RECEIVED
SEP 23 1980

JAMES P. JACKSON
CITY ATTORNEY
THEODORE H. KOBEY, JR.
ASSISTANT CITY ATTORNEY
LELIAND J. SAVAGE
DAVID BENJAMIN
SAM JACKSON
WILLIAM P. CARNAZZO
SABINA ANN GILBERT
STEPHEN B. NOCITA
DEPUTY CITY ATTORNEYS

DEPARTMENT OF LAW
812 TENTH ST. SACRAMENTO, CALIF. 95814
SUITE 201 TELEPHONE (916) 449-5346

September 22, 1980

City Council
Sacramento, California

In re: ORDINANCE EXEMPTING SWIMMING POOL/SPA
COMBINATIONS FROM ACTIVE SOLAR
HEATING REQUIREMENTS

Honorable Members in Session:

SUMMARY

At its meeting of April 8, 1980, Council requested the City Attorney to prepare an amendment to ordinance No. 4341, Fourth Series, exempting swimming pool/spa combinations from active solar heating requirements. Attached is a draft of an ordinance for said purpose.

BACKGROUND INFORMATION

On April 8, 1980, the Council adopted ordinance No. 4341, Fourth Series, to be effective February 1, 1981. As a result of testimony during the hearing on the ordinance, the Council determined to consider an amendment exempting swimming pool/spa combinations from active solar heating requirements imposed by ordinance No. 4341. There is attached to this letter the September 2, 1980 letter from the California Swimming Pool Industry Energy, Codes and Legislative Council commenting on the proposed ordinance. Also attached is the September 16, 1980 letter from The Solarcal Local Government Commission on Conservation and Renewable Resources commenting on the SPEC letter.

*Cont to
10-14-80
SEP 30 1980*

FINANCIAL DATA

There are no fiscal implications for the City.

RECOMMENDATION

This is the submission of a draft ordinance for consideration by the Council.

Respectfully submitted,
Leliand J. Savage
LELIAND J. SAVAGE
Deputy City Attorney

FOR TRANSMITTAL TO CITY COUNCIL:

Walter J. Slipe
WALTER J. SLIPE, City Manager

LS:kn

Attachments

ORDINANCE NO.

FOURTH SERIES

AN ORDINANCE EXEMPTING SWIMMING POOL/SPA
COMBINATIONS FROM ACTIVE SOLAR HEATING
REQUIREMENTS WHERE FOSSIL FUEL NOT USED
TO HEAT POOL

BE IT ENACTED BY THE COUNCIL OF THE CITY OF SACRAMENTO AS FOLLOWS:

SECTION 1.

Section 9.233(g) is added to the Code of the City of Sacramento to read as follows:

Notwithstanding anything in this section to the contrary, no active solar heating system shall be required for any swimming pool and spa combination where a fossil fuel heater and the swimming pool and spa combination are plumbed in a manner such that heated water from the fossil fuel heater can enter only the spa. In order to comply with the foregoing requirement, all such plumbing must be arranged such that it is not possible through the operation of any valve or other device in the plumbing to allow heated water from the fossil fuel heater to enter the swimming pool.

For purposes of the foregoing, the term "swimming pool and spa combination" means a swimming pool in conjunction with a spa which shares a common plumbing with such swimming pool.

SECTION 2.

Section 9.233(h) is added to the Code of the City of Sacramento to read as follows:

It shall be unlawful for any person to modify the plumbing of any pool and spa combination exempt from the requirement to install an active solar heating system under Section 9.233(g) such that, as a result of such modification, the swimming pool and spa combination are plumbed in a manner such that heated water from the fossil fuel heater can enter the pool, unless, prior to or in conjunction with such modification, an active solar heating system which meets the requirements of this section is installed for such swimming pool and spa combination.

PASSED FOR PUBLICATION:

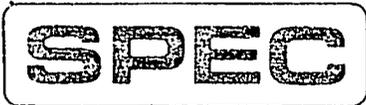
ENACTED:

EFFECTIVE:

ATTEST:

MAYOR

CITY CLERK



California Swimming Pool Industry
Energy, Codes and Legislative Council

September 2, 1980

Leliand J. Savage
Deputy City Attorney
City of Sacramento
812 Tenth Street, Suite 201
Sacramento, California 95814

Dear Lee:

Thank you for forwarding a copy of your proposed amendment to the City's ordinance on swimming pool heaters. We have carefully reviewed the language and would like to take this opportunity to comment on the proposed amendment and other areas of concern regarding the enforcement of the ordinance.

While we consider the proposed amendment to be a definite improvement over the existing language of the ordinance, we still strongly recommend that there be an absolute exemption for pool/spa combinations from the requirements of the ordinance. We feel it makes little or no sense to require separate plumbing to preclude heating of the pool by fossil fuel when every indicator of actual energy use by swimming pool owners shows that they are only using their gas heaters to heat the spa. Given the current and anticipated costs of natural gas to heat a swimming pool (P.G. & E. rate is 67 cents a therm), very few, if any, pool owners can afford or would choose to continually heat their pools. By requiring separate plumbing, government in effect is saying that they do not trust pool/spa owners to do what they intended to do in the first place.

From a technical standpoint, the separate plumbing requirement may cause pool/spa owners operating and potential repair problems. In order to meet the separate plumbing requirement and to prevent pool water from being heated, a three-way manual valve must be installed between the filter and the heater. This diverter valve will allow water to either flow directly to the pool, directly to the heater and into the spa, or to flow both to the pool and spa when in a filtering cycle. The situation may arise when heating the spa that the valve is inadvertently placed in the position of allowing water to flow to both the pool and spa. If this occurs and at the same time, the flow switch on the heater malfunctions, the heater will probably burn out because there is not sufficient water circulating through its coils. This situation can never occur in a traditional plumbing configuration because the valve is always placed behind the heater instead of in front of it.

Leliand J. Savage
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September 2, 1980

The definition of a "swimming pool and spa combination" is defective in that it only includes those pool and spa combinations which are physically joined into a common structure. In some cases, the spa will not be contiguous and will not share a common structure even though they share a common circulation system, because the spa is constructed some distance away from the pool or at a different elevation. We would suggest that this definition be amended to allow for pools and spas which are not structurally connected but do share common plumbing.

Since the time the City Council adopted its solar pool heating ordinance in April of this year, a number of events have occurred which we feel will necessitate the City Council to completely review and rethink their adoption of the pool heating ordinance. One of the reasons the Council adopted a February, 1981, implementation date for the ordinance was to await the outcome of the state legislation to extend the 55% solar tax credit. Although the Legislature passed a new three-year extension of the tax credit on August 30, 1980, the legislation (AB 2036 enclosed) permits only a 45% credit for solar swimming pool systems in 1981, followed by a 35% credit in 1982 and a 25% credit in 1983. Since this revised credit allowance will considerably effect the final outcome of cost-effectiveness calculations required pursuant to Public Resources Code Section 25402.1, it is our opinion that the Council must complete a new cost-effectiveness study and rehear the ordinance on the basis of any changes in the cost-effectiveness results.

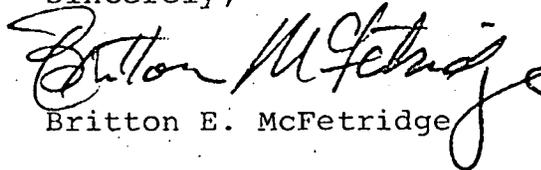
We would also like to bring to the Council's attention the existence of new and shortly to be gathered data on the average actual consumption of natural gas by residential swimming pools. As you will remember, the cost-effectiveness study performed by the Energy Commission for the City of Sacramento used a hypothetical 1134 therms of natural gas as the amount of energy an average pool in Sacramento would consume if a pool cover or solar heater were not in use. Studies have now been completed which show that the average pool owner with a gas heater uses only a small fraction of this hypothetical amount. Although the data available is gathered from pool owner usage patterns in the San Diego area, both the California Energy Commission and P.G. & E. are now in the process of completing studies for the rest of the state including Sacramento. From both the standpoint of a valid cost-effectiveness study and actual energy conservation to be realized from a solar ordinance, we feel the Council would be legally and factually remiss if an additional cost-effectiveness study is not completed using actual average energy use by pool heating instead of the completely inaccurate engineering heat load calculations used in the previous studies done for the City.

Leiland J. Savage
Page 3
September 2, 1980

We would also like to bring to your attention the fact that the solar pool ordinance adopted by the City fails to meet the statutory criteria of "local necessity" for a residential building standard as required by Health and Safety Code Sections 17958, 17958.5 and 17958.7. Under the provisions of these statutes, local building standards can only deviate from the State Building Code if an express finding is made that a local condition reasonably necessitates a different and nonconforming standard. Of the findings which were made in adoption of the solar ordinance, none appear to even remotely meet the local condition criteria.

We would appreciate your response to these comments and I will be more than happy to discuss them further at your convenience.

Sincerely,



Britton E. McFetridge

BEM:rm
Enclosure

cc: Mayor Phillip L. Isenberg
Councilman Lloyd Connelly
Councilman John Roberts
Mel Johnson, City Engineer's Office
Frank Geremia

THE SOLARCAL LOCAL GOVERNMENT COMMISSION ON CONSERVATION AND RENEWABLE RESOURCES

1111 Howe Avenue, Suite 315
Sacramento, California 95825
(916) 920-7621

CURRENT MEMBERS

Larry Asera, Supervisor
Solano County
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Yolo County
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Riverside County

September 16, 1980

Leliand J. Savage
Deputy City Attorney
City of Sacramento
812 10th Street, Suite 201
Sacramento, CA 95814

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SEP 16 1980
CITY ATTORNEY'S OFFICE

Dear Lee:

I have gone over the letter sent to you by Mr. Britton McFetridge of the California Swimming Pool Industry Energy, Codes, and Legislative Council (SPEC). His comments were primarily directed at the proposed amendment to the solar pool heating ordinance passed by the Council on April 8, 1980. The amendment would exempt owners of pool/spa combinations who can demonstrate that "it is not possible through the operation of any valve or other device in the plumbing to allow heated water from the fossil fuel heater to enter the pool." (See attachment).

The industry has indicated that even though the amendment has improved the original ordinance, events have occurred which have made the ordinance even less acceptable to the pool industry. On the contrary, with utility rates skyrocketing, the City Council has even stronger reasons to approve a law designed to reduce the consumption of a nonrenewable energy resource. The following are my responses to Mr. McFetridge's major points:

1. The industry points out that the price of natural gas is significantly altering consumer behavior and that the ordinance because of these rate increases is rendered obsolete.

If gas is becoming too expensive to use to heat pools, why continue to market gas heaters? By not banning the purchasing of pool heaters, the City Council is neither condoning their usage nor assuming how much they are used. The Council is in fact not interfering with consumer choice. It is merely regulating the industry to require a more efficient heating device, which is similar to regulatory actions taken by local, state, and federal governments when building and appliance efficiency standards are enacted. To assume that

consumers will not use their heaters because gas is too expensive begs the question, why did they purchase an \$800 pool heater in the first place? If consumers are not going to use their heaters, then anybody in or outside of government would question the consumer's intent when buying the device.

2. The industry in the third paragraph simulates a hypothetical occurrence which, if taken place, would burn out the heater coils. According to a local solar installer, two safety mechanisms required in the heater will prevent this hypothetical even from occurring. A thermostat monitoring the temperature and a safety device monitoring the pressure will cut off the heater if the flow of water to the heater is decreased.
3. Amending the definition of a "swimming pool and spa combination" to include spas which are not structurally connected to but share a common plumbing system with a pool is a good idea but conflicts with the industry's claim about consumer intent.
4. In April, the City Council was apprised of the potential modifications relating to the California Solar Tax Credit. At that time, testimony was presented fully informing the council of the reduction in the credit as it applied to solar pool heaters. More importantly, however, the Council used criteria other than cost-effectiveness to support their unanimous decision.
5. The Energy Commission used SOLFIN II to compare the costs between heating a pool with solar energy or with natural gas. As a component of this analysis, the Lawrence Berkeley Laboratory POOLS program was used to calculate the amount of therms needed to heat a pool in Sacramento without using solar. The POOLS program was acclaimed by the swimming pool industry as the "state of the art" when calculating thermal energy requirements. In his statement submitted to the Energy Commission on February 13, 1980, Professor Richard A. Robertson of the California State Polytechnic University at Pomona, commented that he had extensively used the POOLS computer program since its release in early 1979. He said, "I now consider myself an expert in the use of the program (POOLS) which, in my opinion, is the state-of-the-art." The burden must now be placed upon SPEC to explain how the method developed by LBL has fallen from being "the state-of-the-art" to being "completely inaccurate," as stated in the third paragraph on the second page of Mr. McFetridge's September 2nd letter.

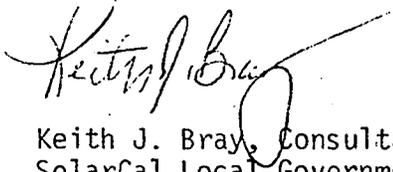
Reported in San Diego Gas and Electric's "Miracle Three Survey," the average amount of natural gas used for heating swimming pools is about 200 therms greater than what was assumed by San Diego County in its cost-effectiveness study. I would recommend that SPEC break its established practice of quoting studies that are always in the process of being completed and submit to the City Council the relevant data that is alleged to be forthcoming.

6. The final point which Mr. McFetridge makes is that certain Health and Safety Code regulations apply to this ordinance. If this was the case, the City would have to file with Housing and Community Development (HCD) findings which would define the conditions of passing the ordinance as meeting "local necessity" criteria. The code states that local necessity must be found if the action by local government changes any state-adopted building codes. Unless it can be shown that these uniform codes are changed, no such finding of local necessity is needed and the routine filing (no public hearing is required) at HCD would be unnecessary. Mr. Savage, I would recommend you contact Dick Ratliff of the Legal Counsel's office at the Energy Commission for further clarification.

Mr. McFetridge requested that a new cost-effectiveness study be completed and that a hearing be held to examine the new data. The reasons that he has outlined for rehearing the ordinance in my opinion are not significant enough to show cause for a new hearing. When making its decision back in April, the Council determined that diverting natural gas to industry and commercial establishments was a more essential use of natural gas and that significant energy conservation could be achieved by implementing this ordinance in February, 1981. Even in the short period which has passed since the ordinance was adopted, the reasons for government to help alleviate the energy crisis have become more compelling and certainly more acceptable to its constituency.

I support the amendment as submitted by the City Attorney and will testify to that effect when the Council considers it.

Sincerely,



Keith J. Bray, Consultant
SolarCal Local Government Commission
Enclosures

cc: Mayor Phillip Isenberg
Councilperson Lloyd Connelly
Councilperson John Roberts
Mel Johnson
Frank Geremia
Judy Corbett
Dick Ratliff

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California Swimming Pool Industry
Energy, Codes and Legislative Council

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CITY OF SACRAMENTO

OCT 14 4 00 PM '80

October 14, 1980

Hon. Phillip L. Isenberg
Mayor of Sacramento
City Hall, Room 202
Sacramento, California 95814

Dear Mayor Isenberg:

Please be advised that the California Swimming Pool Industry Energy, Codes and Legislative Council does not plan to testify at tonight's City Council hearing on the proposed amendment to Ordinance No. 4341, Fourth Series. Our position on the proposed amendment in no way alters our stance on the City's solar pool heating ordinance and should not be construed to mean that we waive any rights we might have to request reconsideration of the ordinance in its entirety by the Council at a later time.

As we thoroughly explained in our September 2, 1980, letter to the City Attorney, we are still opposed to the ordinance, with or without amendments. We feel that the mandated requirements imposed by the ordinance have not been shown to be cost-effective or to cause a diminution of energy consumption. Studies are now in progress by P.G. & E. and the California Energy Commission to measure actual consumption of natural gas by pool heating, the results of which we are certain will show a much reduced amount of gas consumption by pool heating than those figures relied upon by the City Council when adopting this solar ordinance. As soon as this new data becomes public, we plan to petition the Council for a rehearing on the ordinance.

We respectfully request that our position on this matter we made known to the Council during its deliberations on the proposed amendment.

Sincerely,
Britton McPetridge
Britton McPetridge

cc: Councilman Lloyd Connelly
Leliand J. Savage, City Attorney
Frank Geremia

ORDINANCE NO. 4431 FOURTH SERIES

AN ORDINANCE EXEMPTING SWIMMING POOL/SPA
COMBINATIONS FROM ACTIVE SOLAR HEATING
REQUIREMENTS WHERE FOSSIL FUEL NOT USED
TO HEAT POOL

BE IT ENACTED BY THE COUNCIL OF THE CITY OF SACRAMENTO AS FOLLOWS:

SECTION 1.

Section 9.233(g) is added to the Code of the City of Sacramento to read as follows:

Notwithstanding anything in this section to the contrary, no active solar heating system shall be required for any swimming pool and spa combination where a fossil fuel heater and the swimming pool and spa combination are plumbed in a manner such that heated water from the fossil fuel heater can enter only the spa. In order to comply with the foregoing requirement, all such plumbing must be arranged such that it is not possible through the operation of any valve or other device in the plumbing to allow heated water from the fossil fuel heater to enter the swimming pool.

For purposes of the foregoing, the term "swimming pool and spa combination" means a swimming pool in conjunction with a spa which shares a common plumbing with such swimming pool.

SECTION 2.

Section 9.233(h) is added to the Code of the City of Sacramento to read as follows:

It shall be unlawful for any person to modify the plumbing of any pool and spa combination exempt from the requirement to install an active solar heating system under Section 9.233(g) such that, as a result of such modification, the swimming pool and spa combination are plumbed in a manner such that heated water from the fossil fuel heater can enter the pool, unless, prior to or in conjunction with such modification, an active solar heating system which meets the requirements of this section is installed for such swimming pool and spa combination.

PASSED FOR PUBLICATION:

ENACTED:

EFFECTIVE:

ATTEST:

MAYOR

CITY CLERK



CITY OF SACRAMENTO

OFFICE OF THE CITY CLERK

915 I STREET

CITY HALL ROOM 203

SACRAMENTO, CALIFORNIA 95814

TELEPHONE (916) 449-5428

LORRAINE MAGANA
CITY CLERK

October 10, 1980

Keith Bray
SolarCal Local Government Commission
on Conservation and Renewable Resources
1111 Howe Avenue, Suite 315
Sacramento, CA 95825

Dear Mr. Bray:

At the request of Councilman Lloyd Connelly, the following information is furnished.

The City Council will consider a staff/agency report concerning a draft ordinance exempting swimming pool/spa combinations from Active Solar Heating Requirements on October 14, 1980 at the regular City Council meeting, which convenes at 7:30 p.m. This particular topic is Item Number 46 on the agenda.

Please feel free to contact this office at 449-5426 should you have any further questions.

Sincerely,


Lorraine Magana
City Clerk

LM/mm/46

cc: Jerry McFetridge
Councilman Connelly



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CALIFORNIA
OCT 8 3 02 PM '80

LLOYD G. CONNELLY
COUNCILMAN, DISTRICT 6
CITY HALL
915 I STREET
SACRAMENTO, CALIFORNIA 95814
(916) 449-5409

RESIDENCE
4140 - 62ND STREET
SACRAMENTO, CALIFORNIA 95820
(916) 455-8950

October 6, 1980

Lorraine Magana
City Clerk

Dear Lorraine:

Would you please insure that Keith Bray of the SolarCal Local Government Commission on Conservation and Renewable Resources at 1111 Howe Avenue, Suite 315, Sacramento, CA 95825 and that Jerry McPetridge of the California Swimming Pool Industry Energy Codes and Legislative Council at 925 "L" Street, Suite 970, Sacramento, CA 95814 are notified when the proposed amendments to the city ordinance regarding solar heating of swimming pools is scheduled to come to Council for review. It is my understanding that the date for this matter will be October 14, 1980.

Thank you for your assistance and confirmation.

Cordially,


Lloyd G. Connelly
City Councilman
District 6

LC:dc

cc: Keith Bray
Britton E. McPetridge

*Mike - Please send
letter notifying them
of placement on
agenda 10-14-80, Item
46, I think!*

