DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 88TH AIR BASE WING (AFMC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

14 June 1995

MEMORANDUM FOR 88 CEG/CEH

FROM: 88 ABW/EMB

SUBJECT: Radon Results

1. Over the past few months Air-to-Air heat exchangers have been installed in nine selected base housing units. The purpose of this installation was to determine the efficiency of these devices in reducing the indoor radon levels. The housing units used in this test were selected because of their varying designs and annual average radon level. The housing unit with the highest annual average radon level was included in this test.

2. For all but one of the test houses, a short term (three to seven day) radon measurement was obtained before the heat exchanger was installed. This measurement was used as a direct comparison to a second short term measurement made after the heat exchanger was installed and operational. All short term measurements were made using a Rad Elec E-Perm® System.

3. The following table shows the results of the testing, with radon levels expressed in picocuries per liter (pCi/l):

Address	Annual Radon Average	Pre Installation Radon Level	Radon Level After Turn on	Percent Reduction (Short Term)	Percent Reduction (Annual Average)
5581 Gross Drive	17.6	13.38	3.20	76.08%	81.82%
369 Crab Apple	6.3	6.42	3.18	50.47%	49.52%
827 Red Maple	7.3	7.26	2.51	65.43%	65.62%
552 Peach Tree	12.8	18.18	1.59	91.25%	87.58%
554 Peach Tree	5.3	5.09	1.48	70.92%	72.08%
803 Red Maple	9.4	13.06	1.38	89.43%	85.32%
811 Red Maple	8.3	9.00	2.66	70.44%	67.95%
840 Talbott	3.3	8.97	0.28	96.88%	91.52%
316 Red Bud	4.3	N/A	1.32	N/A	69.30%
		Average Reduction =		67.88%	74.52%

4. The results of this test indicate these air-to-air heat exchangers are capable of reducing the radon levels in base housing units to below the Environmental Protection Agency's recommended action level of 4.0 pCi/l.

5. If you have any questions regarding this letter, please contact Mr. Gary Lindsey at extension 7-2010.

MARK L. MAYS
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Office of Environmental Management