Memo

To: Mr. Jerald White

From: Dr. Howard Mielke, Ph.D.

Date: July 20, 1998

Re: Agricultural Street Superfund Site

You was asked me to attend the July 9, 1998, Agriculture Street Superfund Meeting, held at City Hall, for a presentation by the EPA, Corps of Engineers, ATSDR and HUD. The purpose of this memo is to recommend **approval** of the EPA remediation plan and to provide rationale and supporting information for taking this critical step on behalf of the citizens of New Orleans.

The Agriculture Street community, (including Press Park Apartments and Gordon Plaza) is on the National Priority List as a Superfund Site. There is long experience with the siting communities on waste materials around the world. Major cities of the world have done this to discard waste and then expand their land areas for developing new communities. New Orleans has several such sites. It is unfortunate and misleading that one such community has been singled out as hazardous.

However, once a site has been officially listed as a Superfund site, specific legal requirements must be met for removal from the list. Without removal from the list, the members of the community will continue to feel the effects financially, physically and emotionally. They are hindered in selling their properties. They are worried about the cause of existing and potential physical ailments. They are enduring emotional strain from the lack of a speedy and satisfying resolution. The negative feelings of the citizens living at the Agriculture Street Superfund site are fully understandable. I have the strongest concern for the quandary of these citizens are in and believe it is imperative to provide relief to this community. As I will argue, for the sake of the community and the whole city, actions to remove the community from Superfund status should be vigorously pursued.

The presentations at the July 9 meeting were succinct and provided details concerning remedial actions to satisfy the necessary legal requirements to remove the community from the Superfund list. The EPA has undertaken study and presented a comprehensive plan for resolution to de-list the site. The EPA has set aside \$20 million for this project. They must be notified by August 1 to begin the project. It will be completed within 2 years. There is no plan for relocation and it was clearly stated that

a buyout would <u>not</u> happen. There are several consistent facts regarding the alleged toxicity mentioned for the Agriculture Street Superfund Site. I emphasize lead, but experience has shown that when lead contamination is high, many other toxic substances are also high.

First, the agency stated that they would immediately act to de-list Mopton School from Superfund status. I concur with this decision. A few years ago I was asked by Orleans Parish school administrators to evaluate documents concerning the alleged hazards present at Moton School. We compared Moton with other schools in the Parish and concluded that the school grounds contained lower quantities of toxic substances than at most other schools in the system. It is possible that when students were removed from Moton, they were moved into older schools that were more contaminated, because of deteriorating lead-based paint and higher amounts of lead in the soil concentrated near school entrances (from paint and decades of leaded gasoline use).

Second, EPA is conducting the remedial action as a voluntary choice for the property owners of the community. This indicates that EPA scientists are confident that the people at the Agriculture Street Superfund site are not at risk for exposure to the alleged hazards posed by the site. Lead is alleged to be a problem on the site. Indeed, there are some hot spots in residential areas. However, from my experience as a researcher of urban toxicology, I concur with the EPA findings. The soil used for covering the landfill was relatively clean. The Agriculture Street community was built after lead-based paint was banned. It was also built after the peak use of leaded gasoline, a major contributor to lead accumulation in the city. In order to establish perspective, the Agriculture Street Superfund Site must be viewed within the context of New Orleans as a whole. I've attached a copy of the lead map of the city produced from empirical research conducted at Xavier to show relative differences in soil lead content throughout New Orleans. From the perspective of the whole city, the amounts of lead on the site are at the low end of the spectrum. Note the amount of lead in the census tract of the Superfund community from our survey (collected 7/90). We found a median soil lead content of about 200 ppm (the median is the central tendency, i.e. ½ measure above and ½ below the median). In contrast, and to illustrate my point, median soil lead of the census tracts that the mayor and I live in contain 400 and 800 ppm lead, respectively, or 2-4 times more lead. If EPA had focused as much attention on one of our communities as the agency did on the Agriculture Street Community, a higher percentage of soil samples with larger quantities of lead would have been identified. The mayor's property is likely to contain 2 times more lead in the soil than the properties of the residences of the Agriculture Street Site.

Third, objective measure of children's blood lead in the Agriculture Street community indicates relatively low exposure. Children in a population are the most sensitive to environmental contaminants. The CDC threshold for preventing or reducing childhood lead poisoning is measured from blood lead. $10\mu g/dL$ and above is the threshold for poisoning. The children of the Agriculture Street Site have lower blood lead concentrations (with a median of 6.6 $\mu g/dL$) than do many other children in the city. See Table 1

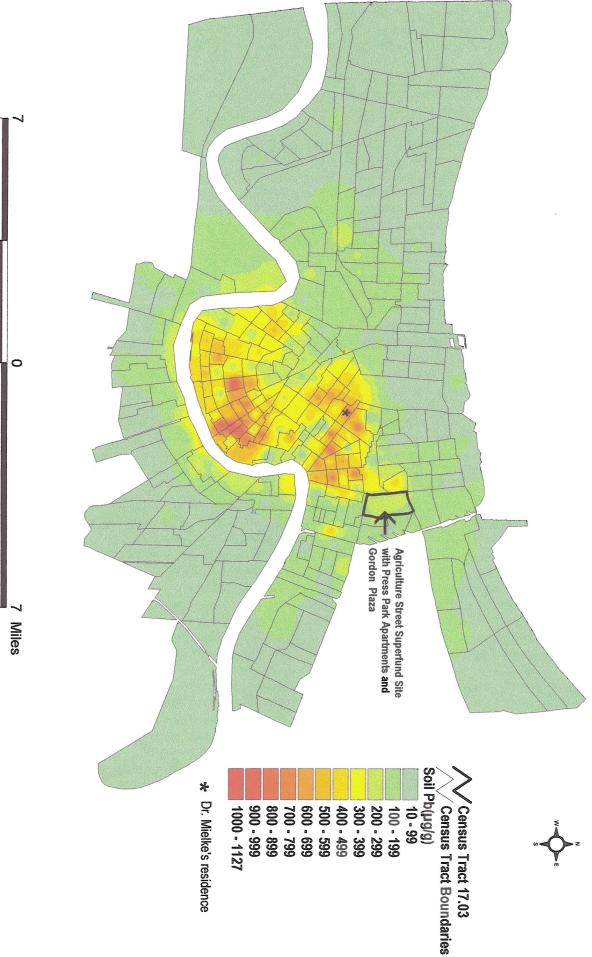
for perspective on this issue. In many census tracts the median blood lead concentrations of children is above $10\mu g/dL$, and some are even above 20ug/dL.

Concerning the final recommendation on the issue of relocation. Considering the above observations, the issue of relocation becomes problematic. Relocation of the residents of the Agriculture Street Superfund Site may in fact move them to more hazardous, not less hazardous locations. Relocating the children to other parts of the city may increase, not decrease their exposure to lead. In my judgment, the major effort must be to de-list this community so that the members are free to relocate on their own should they choose to do so.

Reservations. My major concern about the remedial action is the plan to remove mature trees on private lots. Only a few large trees exist in the community. Trees are resistant to passing toxic substances from the soil through their roots. Yet residents at the Agriculture Street site believe they cannot eat the fruit from the citrus trees they have grown over the years. It is more likely that their home grown fruit contains less toxic chemicals—insecticides and fungicides—than do the commercial fruit purchased from stores. Given the voluntary nature of the remedial action, the measure to remove trees does not make sense nor is it in the best interest of the appearance and comfort of the community. Hand shoveling the top 3-6 inches of dirt from the surface and replacing it with 3-6 inches of cleaner soil in order to maintain the mature trees would be less destructive.

Courageous Leadership. The mayor has responsibility to the whole city. It is clear to me that he must take the steps to de-list the Agriculture Street Community as a Superfund Site. The community has one of the finest schools in the system. The community, in terms of lead contamination is one of the least toxic in the city. The funds are in place and the technical staff and personnel are ready to take the actions necessary to perform the legally required remedy to de-list the Agriculture Street Community as a Superfund site. I believe the problem is political, not scientific. The mayor has the power to persuade and the charisma to brighten peoples thoughts about themselves and their community. It is not an easy task to build trust or to build community. However, every community within New Orleans is important and the Agriculture Street community's national priority listing must be resolved. There are far larger toxic problems from lead contamination facing the children of this city than the alleged toxicity at the Agriculture Street Site. I am personally disheartened by the fact that \$20 million are being spent where problems appear to be minor and not a dime is being spent where the environmental contamination and health problems are so well identified in New Orleans. See the attached scientific paper on children's lead exposure in New Orleans. Wisdom has not played a strong role in dealing with toxic substances in US cities. In the near future, I hope that resources can be focused where our best understanding shows us that the youngest citizens of the city are suffering and need help to prevent the long-term effects of chronic exposure to lead. I hope we can all learn from this experience and move on to do the larger work that needs to be done to improve the health of the citizens of our city.

New Orleans Soil Lead Map



Census	Median Blood Lead	Median Soil Lead
Tract	mcg/dL	ppm
79	25	817
18	18	730
78	16.75	850
67	16	970
12	16	1043
40	15.9	600
125	15	336
109	14.45	231
82	14.4	960
84	14.2	610
91	14.1	725
93.01	14	366
49	14	490
41	14	720
131	13	190
99	13	174
92	13	940
86	13	470
71	13	290
20	13	290
130	12.9	478
60	12.55	349.5
127	12.5	550
106	12.4	346.5
89	12	364
81.02	12	590
64	12	492
63	12	660
54	12	444
34	12	680
35	11.55	492
111	11.4	262
124	11	289
85	11	384
81.01	11	195
69	11	303
48	11	168
45	11	289
44.01	11	18
24.02	11	474
126	10.5	438
50	10.5	740
44.02	10.5	120
39	10.5	336
7.02	10.5	184
101	10.4	1000
103	10.2	218
112	10.1	224
88	10.1	1070
129	10	430
102	10	775
93.02	10	232
70	10	173
29	10	570
19	10	780
2	10	232

1	10	414
80	9.5	580
13.04	9.5	000
87	9.2	392
83	9.2	1120
107	9	216
105	9	600
100	9	524
94	9	367
77	9	640
36	9	388
27	9	
		508
21	9	990
11	9	560
97	8.85	450
22	8.6	146
30	8.5	448
15	8.25	486
96	8.1	440
13.03	8.1	
72	8.05	222
132	8	380
76.05	8	150
75.02	8	122
65	8	380
37.02	8	820
33.06	8	128
14.01	8	124
9.03	8	58
6.14	8	26
3	7.85	190
75.01	7.55	94
114	7.5	550
7.01	7.5	65
4	7.5	64
123	7.45	298
25.03	7.4	165
13.02		235
	7.2	
68	7	408
46	7	50
13.01	7	232
6.13	7	21
17.03	6.6	218
9.04	6.5	106
17.27	6.4	26
33.07	6.35	51
17.14	6.1	212
205	6	28
204	6	25
33.08	6	118
23	6	76
17.24	6	41
17.2	6	169
9.02	6	153.5
9.01	6	9
8	6	30
28	5.9	146
24.01	5.9	248
33.04	5.75	122

Agriculture Street Superfund Site

6.01	5.7	44
201	5.5	80
31	5.5	312
25.02	5.5	40
16	5.5	158
14.02	5.5	186
33.05	5.4	191
17.23	5.15	149
218	5	108.5
211	5	83
210	5	82
202.01	5	26
33.03	5	109
17.32	5	40
17.26	5	24
17.21	5	54
17.02	4.95	151
6.08	4.85	87
6.02	4.85	80
25.04	4.6	249
6.03	4.6	58
33.02	4.5	8
6.05	4.3	68.5
6.04	4.2	35
216	4	22
215	4	59
214	4	56
212	4	41
209	4	32
207	4	53
206	4	63
17.29	4	
17.22	4	136
6.11	4	66
25.01	3.85	132
17.28	3.65	40
213	3.5	48
17.01	3.25	150
6.12	3.1	12
219	3	67.5
217	3	74
17.25	3	24
17.33	2	