Tom came to this meeting + was quite cordial, but he never followed up with us regarding continued improvements.

Thomas W. Caldwell
Madison-Kipp Corporation
201 Waubesa Street
P.O. Box 3037
Madison, WI 53704

9 September 1991

Dear Tom,

Our neighborhood group has been meeting regularly since we first spoke to you in March. We've spent the time gaining a better understanding of foundry operations, and collecting and analyzing data about noise, emissions, odors/fumes emitted by Kipp. We are at the point where we'd very much like to meet with you, Katie Tractie, Gary Scholl, and any other Kipp representatives you feel should be part of a Kipp-neighborhood "coffee"/get-together.

The purpose of getting together would be to talk with you in further detail about our findings and recommendations. [See enclosed report] We wouldn't expect you to make decisions or commitments at this time, but would anticipate lots of open dialogue. Since several of our hoped for improvements involve Kipp time, energy, and in some cases, money, we'd appreciate it if you would personally attend, along with Katie and Gary.

We're also planning to invite several resource people who assisted us in our research, primarily so that if questions come up, they can be answered on the spot. Hank Lufler will be attending as well.

We'd like to have you over for coffee on Thursday, September 19th, from 7 to 9:00 p.m., at 129 South Marquette. An agenda is enclosed. Please let Jan O'Neill know by Wednesday, September 11th, if this is convenient. We look forward to hearing from you.

Sincerely,

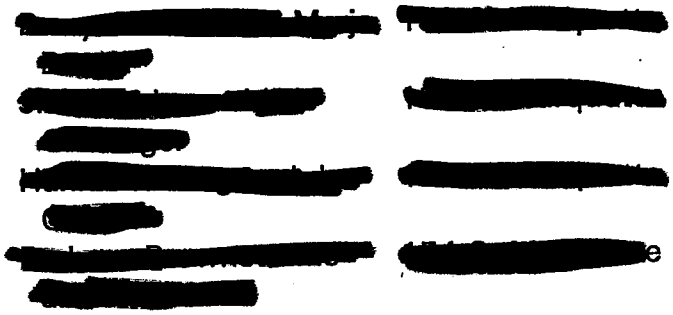
[redacted]

For Tom Caldwell et al

Kipp-Neighborhood Group Report
23 August 1991

Background

We are a group of neighbors owning homes on South Marquette Street (see map) who share a common interest in maintaining and improving the quality of our neighborhood's environment. We are:



We formed in February of 1991 following the Kipp "open house" and have been meeting on a regular basis since that time. During a conversation just prior to the open house, several of us agreed that there had been an increase in the frequency and intensity of noise, odors and emissions coming from Kipp over the past year. Although Kipp's tour helped us better understand the foundry's operations, it also left many unanswered questions and introduced some we had not considered.

Over the last six months we have invited guests from various public agencies to our meetings in order to gain a better understanding of the laws, requirements and processes involved in foundry operations.

We have also gathered data from the neighborhood that we hope will aid in a dialogue with Kipp representatives. Our goals in this dialogue are to further reduce:

1. chemical emission levels
2. smoke and odor levels
3. noise levels

It has been our impression that Kipp strives to be a good neighbor, so we look forward to working closely with Kipp over the next several months toward the above goals.

Problems and Concerns

We came together, as mentioned above, because we noticed an apparent increase in the amount of noise, odors and emissions coming from the Kipp over the past year. Rather than simply calling Kipp to report each incident, we decided we needed to be better informed about the nature of these problems.

In the course of our investigation we have met with a number of different people. We notified Hank Lufler, our alderperson, to let him know of our interest in pursuing these problems. We spoke with Greg Eirschele, an air quality expert from WP & L. Mark Salee, from the Public Health Department, outlined the various foundry procedures that would require safety policies. We discussed with David Sellers' his DNR report regarding air emissions. Cherie Melville, from Building Inspection, talked with us about zoning regulations regarding noise. Captain Mike Masterson, from the Police Department, assisted us with our noise study.

What We Found Out
Air Pollution: Emissions, Odors, Fumes

Kipp's older reverberatory aluminum melting furnace requires fluxing--the addition of salts of magnesium, aluminum, zinc, and copper to remove impurities from the melt. It also requires demagging, a process involving chlorine to reduce the magnesium content. Of these ingredients, both aluminum and chlorine can be toxic, depending on route of ingestion and concentration.

The state's investigation during August and September of 1990 concerned particulates and gases; no violation was found at that time. The violation threshold is 20% opacity; that is, emissions must be less than 20% opaque when viewed with the sun behind the observer. No emissions were observed meeting these conditions. Although Sellers did notice visible emissions from the aluminum die cast area on September 20th, the sun was behind them. There was also a discernible oily smell in the air, perhaps due to periodic "dirty" burns of oil-coated casings. This smell is one that we, as residents, regularly notice; it tends to accompany a blue-brown or grey haze.

The second reverbatory furnace, installed in 1990, involves no fluxing or demagging and, according to the DNR, "does not result in the emission of any hazardous air contaminant in quantities that would result in adverse effects...Allowed emissions do not threaten the TSP (total suspended particulates) air quality standard."

Stack heights must be at least 40 feet; it appears that Kipp meets these requirements. (However, the placement of "rain caps" over the stacks may have

caused emissions to disperse into the neighborhood rather than *over* the neighborhood. It seems that Kipp has removed the caps.)

Sellers' dispersion model analysis also indicates that Kipp's emission rates do not exceed air quality standards for TSP. The analysis is based on the numbers provided in Table 1. (However, Sellers is in the process of re-analyzing the data based on a distance nearer to the stacks, since he feels there may be a danger of particulate levels at maximum capacity.)

Chlorine emergency plans have been filed with the city. Because of the double tank system, the Public Health Department's "worst case" analysis is that the danger would come from release during transport rather than storage. Small leaks would be noticed by a burning in the eyes and throat, as well as respiratory problems. A large leak would be indicated by burning sensations while breathing, and coughing up blood. Neither situation has occurred, as far as we know, in our neighborhood.

In sum, although we have periodically noticed smoke and odors emitted by the foundry, it seems that currently Kipp is not in violation of any state or public health regulations.

Noise

The most noticeable noises we hear as neighbors are sounds from the shakers--vibrating dumpster-like containers, the spirotron, which cleans and tumbles parts, and the forklift trucks. Our perception is that these noises have all grown more frequent and louder since the installation of the second furnace last year. The addition of a large garage door at the north end of the building contributes to the noise dispersion.

The current noise limit for commercial manufacturing companies in residential areas is 75 dBA. Although there has been a proposal developed by the city's Building Inspection Unit to significantly reduce this standard (to 50 dBA), this is currently in draft form and is moving slowly through the city's administrative and political processes. Additionally, existing businesses would be grandfathered in, even if the proposal goes through.

Noise tests conducted by the Police Department on July 9, 10 and 12 found most readings registered between 57 and 72 dBA, with the most frequent reading at 63 dBA. Specific "spikes" noted were described as "blower noise" and "hammering."

Our own test was conducted on July 29, a relatively quiet day (since it was the end of the month and Kipp operations were at a low level.) Our readings were somewhat higher than what the officers found---between 60 and 75 dBA, with one extreme spike (at 12:00 a.m.) at 80 dBA. The most frequent reading was 67 dBA, with spikes occurring whenever forklift trucks drove by (73, 75, 80 dBA). Specific noises, over and beyond the general "roar," were described as "crashing metal," "shaking metal," "metal pieces falling," "rushing," "whistling," "clanging bells," "hammering," "ringing chain," "hissing," "forklift beeping." Peak noise occurred around 6:30 a.m. and 10 p.m. All readings were taken 50 feet from the Kipp property line at 166 S. Marquette.

Neighborhood Monitoring: Checking our perceptions

Monitor sheets for noise, odor and emissions were passed out on Marquette and Waubesa Streets for the month of June. 26 people representing 19 households agreed to collect data; 12 people representing 7 households followed through.

This information has been tabulated and sent to the Public Health Department where it is being analyzed for patterns of noise, odor and emissions. The strongest patterns, given our first review of the data appear to occur between 6 and 7 a.m. and between 10 and 11 p.m.

This information is also being stratified by day of the week. Charts and graphs summarizing these data will be available in September.

Improvements Made by Kipp

We have appreciated a number of improvements already made by Kipp. They include:

* landscaping - *evergreens and shrubs were planted along the fenceline at the parking lot on the Marquette Street side*
* propane containment - *a valve was installed to prevent escape of propane*
* noise baffle - *a baffle was installed at air intake*
* fork lift trucks - *fork lift trucks no longer back up during late night and early morning hours*
* radios - *employees no longer play their radios loudly in the windows*
* parking lot - *after-work socializing and traffic has decreased*
* screen fence - *a fence was installed behind 150 S. Marquette, though its purpose is not clear to us*
* stack tops - *caps have been removed from stacks which has improved the dispersion of emissions*

Further Changes We'd Like to See

Although Kipp has made a number of improvements in response to neighbors' requests, we feel the following items would much improve quality of life in our neighborhood. We would appreciate Kipp's consideration of these items:

* Increase stack heights
  This will further improve the dispersion of air emissions and decrease the roar of the furnace heard behind homes on South Marquette
* Increase filtered ventilation
  ** Our interest in ventilating the building is to decrease the escape of sound and air emissions through open doors and windows.*
* Limit opening of bay door in evening hours
  ** This would significantly lower the noise heard at bed times.*
* Limit decibel level outside building
  ** Limit to no more than 65 dBA during daylight hours and no more than 55 dBA in the evening and night. Pay particular attention to noise levels at shift changes.*
* Schedule noisy procedures during the day
  ** Currently there are periodic loud crashes and banging noises inside and outside of the building during evening and morning hours. What are the sources of these noises, and could these operations occur while most people are at work, or at least awake?*
* Equip forklift trucks with alternative safety mechanisms
  ** Forklift trucks beep when backing up or going around corners. They also make crashing noises when going over bumps. We are requesting thatt various improvements be made to the trucks to quiet their work.*
* Distribute chlorine evacuation procedures
  ** Educating the neighborhood about what to do in the unlikely event of a problem will help us all feel safer.*
* Regularly communicate Kipp news
  ** Because many of us live in Kipp's "backyard," it's difficult to ignore sights and sounds which, because we have no information about what they mean, concern us a great deal. One example is the accident which occurred this summer involving four employees. Our suggestion is to publish a regular newsletter or hold regular meetings to keep us appraised of plans, events, and Kipp-neighborhood issues. More information, delivered more regularly, would go far to alleviate neighborhood fears and concerns.*
* Construct industrial barricades
  ** All fences and barricades in the city must comply with an 8 foot limit. However, we have been told by Building Inspection that*

getting a variance for industrial barricades is not a problem, provided the neighborhood wants them. More than anything else, this countermeasure would alleviate noise concerns.

Remaining Questions

In conclusion, we have several questions we would like to discuss with Kipp representatives:

* What are Kipp's policies with regard to noise?
  * *Employee policies, equipment policies, schedule, etc.*
* Have shakers been lined with wood?
  * *We were told this was planned in order to reduce noise from shaking the metal.*
* Have filters been installed in the highest bay areas? Will fans be installed?
  * *We understand Kipp is adding 8 new filtered exhaust fans to the foundry. We'd like to know what effect this will have on closing windows and doors.*
* What are Kipp's plans for growth?
  * *This is probably **the** key question concerning us: If we are finding noise and emission levels difficult to deal with now, what will they be like in the future?*

Summary

Again, we appreciate Kipp's past willingness to improve its operations, both for the sake of its employees and for the neighborhood. And according to our studies, Kipp is in compliance with all noise and emission regulations and standards. We do, however, believe that continuously improving conditions is essential if good relations are to be maintained. A willingness to go beyond "acceptable" limits and tolerances is the mark of a truly committed neighbor. We hope this will be Kipp's attitude.

Our main purpose in collecting this data, and in meeting with Kipp, is to open a dialogue about what can be done to further reduce levels of noise, odors and fumes, and to increase the feeling of safety the neighborhood feels in being Kipp's next-door neighbor. We have described a number of improvement ideas, and look forward to discussing these---and/or others---with Kipp.

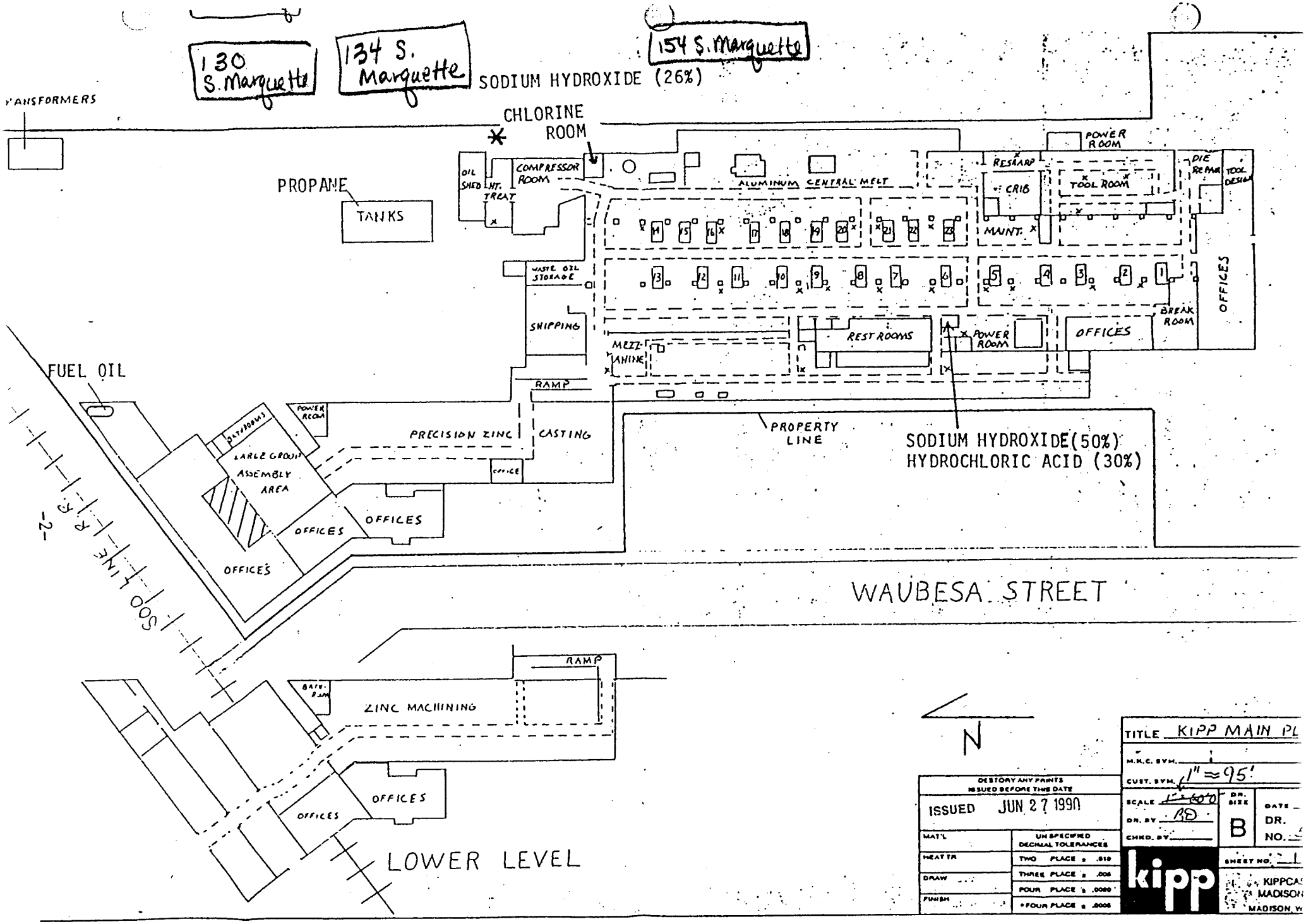

130 S. Marquette
134 S. Marquette
154 S. Marquette
SODIUM HYDROXIDE (26%)
TRANSFORMERS
CHLORINE ROOM
PROPANE TANKS
OIL SHED
HT. TREAT
COMPRESSOR ROOM
ALUMINUM CENTRAL MELT
RESAND
CRIB
POWER ROOM
TOOL ROOM
DIE REPAIR
TOOL DESIGN
MAINT.
OFFICES
WASTE OIL STORAGE
SHIPPING
MEZZ-ANINE
REST ROOMS
POWER ROOM
OFFICES
BREAK ROOM
RAMP
FUEL OIL
PRECISION ZINC CASTING
OFFICE
PROPERTY LINE
SODIUM HYDROXIDE(50%)
HYDROCHLORIC ACID (30%)
LARGE GROUP ASSEMBLY AREA
OFFICES
OFFICES
OFFICES
SOO LINE R.R.
WAUBESA STREET
RAMP
ZINC MACHINING
OFFICES
OFFICES
LOWER LEVEL
N
DESTORY ANY PRINTS ISSUED BEFORE THIS DATE
ISSUED JUN 27 1990
MAT'L
HEAT TR
DRAW
FINISH
UNSPECIFIED DECIMAL TOLERANCES
TWO PLACE ± .010
THREE PLACE ± .005
FOUR PLACE ± .0050
*FOUR PLACE ± .0005
TITLE KIPP MAIN PL
M.K.C. SYM.
CUST. SYM.
1" = 95'
SCALE 1" = 60'
DR. BY RD
CHKD. BY
DR. SIZE B
DATE
DR. NO.
SHEET NO. 1
kipp
KIPPCA
MADISON
MADISON, W

TABLE 1

	St13	St17	St18
Stack Number	0.0	0.0	0.0
Easting (m)	0.0	3.0	6.0
Northing (m)			
Rainhat?	No	Yes	Yes
Stack Height (m)	9.14	12.2	12.2
Stack Diameter (m)	0.71	0.84	0.84
Stack Gas Exit Velocity (m/s)	8.94	0.1	0.1
Stack Gas Temperature (°K)	366	454	454
Building Height (m)	11.8	11.8	11.8
Building Horizontal Dim (m)	132.0	132.0	132.0
TSP Emission Rate (lb/hr)	3.0 (3 hrs daily) 1.17 (21 hrs daily)	0.72	0.72
HCL Emission Rate (lb/hr)	1.05 (3 hrs daily)		

MONITOR SHEET ON KIPP CORPORATION

SAMPLE

N= NOISE O=ODOR S=SMOKE

TIME	SAT	SUN	MON	TUE	WED	THU	FRI	DESCRIPTION
5-6 am								
6-7 am								
7-8 am								
8-9 am								
9-10 am								
10-11 am								
11-12 pm								
12-1 pm								
1-2 pm								
2-3 pm								
3-4 pm								
4-5 pm								
5-6 pm								
6-7 pm								
7-8 pm								
8-9 pm								
9-10 pm								
10-11 pm								
11-12 am								
12-1 am								
1-2 am								
2-3 am								
3-4 am								
4-5 am								

- Leave the squares blank–if you're not at home or if you're asleep.
- Please provide as much description as possible–that will make this a much more meaningful chart.
- If the noise is quiet, please indicate that, as opposed to a complete shutdown.