IOWA DEPARTMENT OF NATURAL RESOURCES
FIELD SERVICES AND COMPLIANCE BUREAU
FIELD OFFICE #2 - MASON CITY IOWA

DATE: **September 23, 2010**

TO: **The Record**

FROM: **Michelle Johnson** MMJ

SUBJECT: **Vapor Investigation - HSI #091410-SJW-1100**
Humboldt, Iowa; Humboldt County

On 09/14/10, this office received a call at 11:00 a.m. from Leroy Clapper, Humboldt Street Department, reporting diesel vapors in the city's storm sewer. Leroy's phone number in 515-890-7022. I met Leroy at the location where the vapors were smelled, 10th St N north of Hwy 3, at 1:20 p.m. Curt Marten, City Engineer, was also present. Curt told me he first smelled the vapors the previous day at 5:00 p.m. The city was checking the location to determine what direction lines were going for some construction work farther to the east.

Leroy and I checked several storm sewer locations to see if we could smell the vapors. We smelled vapors in a storm drain northeast of the intersection of 10th St N and Hwy 3. This drain was south of the initial reported location. We then checked upstream manholes on 12th Ave N (12th Ave N and 10th St N, 12th Ave N and 11th St N). We smelled diesel vapors at both of those locations as well. The next upstream location was 11th St N and 16th Ave N, where diesel vapors were also smelled. We checked the next upstream manhole, just to the west of 11th St N on 16th Ave N, and did not smell any vapors. We checked a storm drain to the east of 11th St N on 16th Ave N and did not smell any vapors. Leroy told me there were no more manholes located north of 16th Ave N in the vicinity of 11th St N. There was flowing water at all locations we checked. I looked for sheen on the water at many of the locations and did not see any.

I returned to Humboldt on 09/16/10 to follow-up. I stopped at the manhole at 11th St N and 16th Ave N, where I smelled strong gasoline vapors. There was water flowing and I did not see any sheen on the water. I collected a water sample to test for TEH and Btex. Leroy met me and we checked the storm drain to the east and did not smell any vapors. We smelled slightly weaker gasoline vapors at the two manholes on 12th Ave N. We checked the manhole at the initial reported location as well as the storm drain to the south and did not smell any vapors. We went to the manhole on 16th Ave N to the west of the manhole at 16th Ave N and 11th St N and smelled strong gasoline vapors. We smelled the same vapors in a storm drain at 16th Ave N and 13th St N. As was the case two days before, there was flowing water at all locations we checked and I did not see any sheen on the water.

I asked Leroy to contact someone with equipment to test for explosive gases. He contacted People Services, who tested the manholes on 16th Ave N on the afternoon of 09/16/10. Leroy reported to me that no explosive gases were detected.

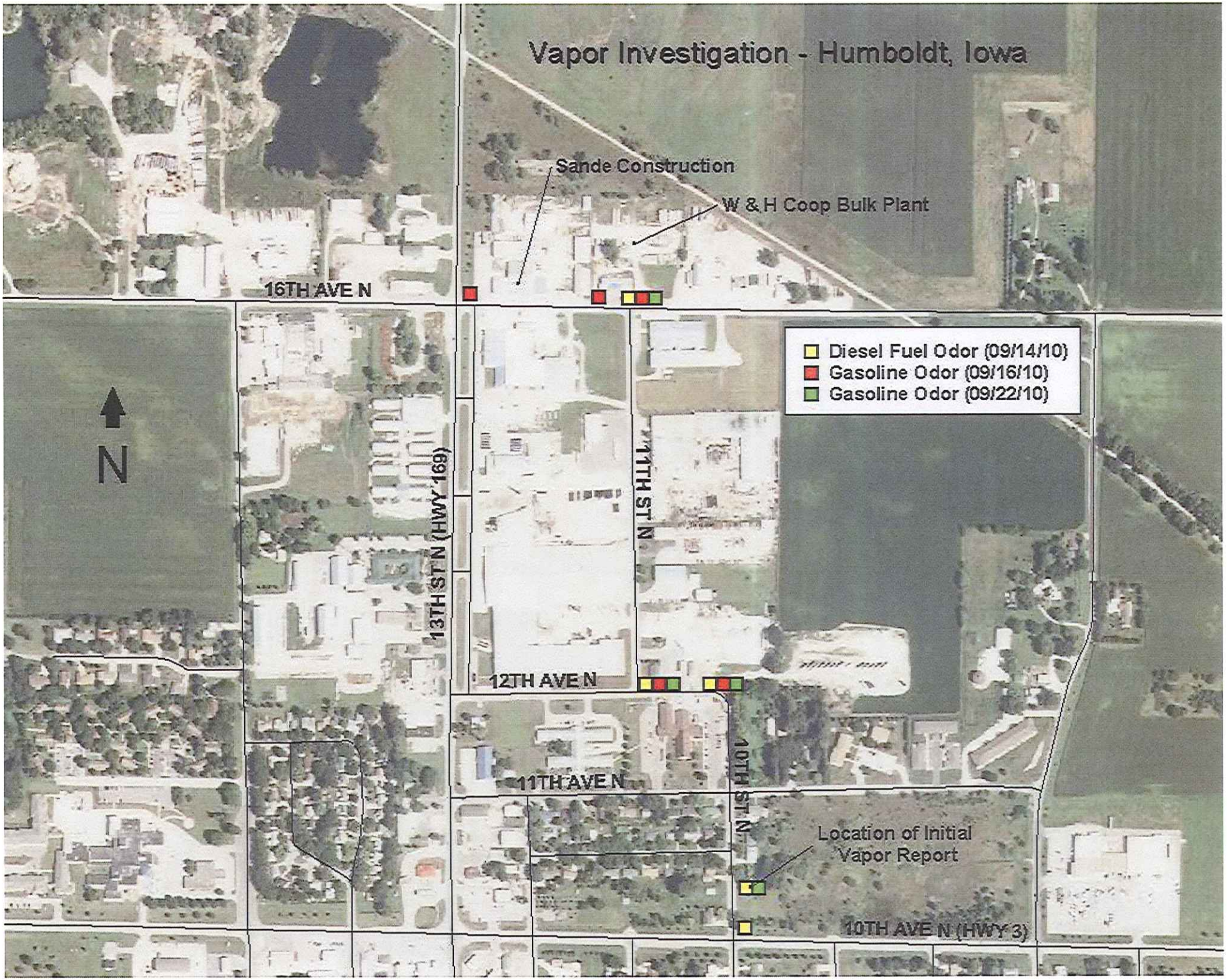
The strongest vapors were smelled downstream of the W & H Cooperative Bulk Plant. The DNR investigated a complaint alleging soil contamination in October 1991, subsequently confirming the presence of contamination. The site was remediated and monitored throughout the next several years. The cooperative was approved to terminate monitoring in November 2004.

On 09/16/10 I talked to Steve Sande of Sande Construction. Steve has worked at the company since 1993. They were hired to put in clean fill at the W & H site after the contamination was removed. Steve has noticed vapors in the storm drain near their building for years, and typically on cooler days and in the winter. He always assumed it was residual from the W & H site.

On 09/22/10 David Hopper, DNR, checked the locations for vapors. He smelled strong gasoline vapors at the manhole at 16th Ave N and 11th St N. He did not smell any vapors at the next two locations to the west, or at the location to the east. He also smelled gasoline vapors at the manholes on 12th Ave N and the location of the initial vapor report on 10th St N.

The attached aerial image summarizes my observations. Based on my investigation, I speculate that the vapors are originating from remaining contamination at the W & H Cooperative Bulk Plant. I called Greg Stiltz, W & H Operations Manager, on 09/23/10 to discuss the matter. Greg's number is 515-890-9677. I told him I would be sending a letter with monitoring requirements.

c: Contaminated Sites (Matt Culp)
Emergency Response


Vapor Investigation - Humboldt, Iowa
Sande Construction
W & H Coop Bulk Plant
16TH AVE N
Diesel Fuel Odor (09/14/10)
Gasoline Odor (09/16/10)
Gasoline Odor (09/22/10)
N
13TH ST N (HWY 169)
11TH ST N
12TH AVE N
11TH AVE N
10TH ST N
Location of Initial Vapor Report
10TH AVE N (HWY 3)