

July 5, 1996

From: Scott Glass, SOUTHDIV

To: David Douglas, MPCA
Tom Bloom, EPA Region V

Subj: REVISED INTERVIEW NOTES FROM OU3 SITE EVALUATION

Attached please find the revised interview notes that Brown & Root compiled based on interviews conducted with past and present employees. During the last pre-RAB meeting at the MPCA office, the Navy agreed to clarify and resubmit the notes. Revisions include clarification of "SWMUs" referenced throughout the notes, and clarification of the "Interview with past contractor on August 23, 1995" entry, based on follow-up conversations with this individual. Please discard the previous version of these notes and replace with this updated version. If you have any questions, please call.

Respectfully,



Scott Glass

NIROP FRIDLEY OU3 NOTES TAKEN DURING EMPLOYEE INTERVIEWS

Interview conducted on August 10, 1995 with present employee of Plating Department.

Q: How long have you worked in the Plating Department?

A: Approximately 40 years.

Q: How did they discharge the rinsewater from the Department?

A: Prior to 1973 the sewer system was the point of discharge for the rinsewater.

Q: How was TCE transported?

A: After 1973 TCE was transported by drums or tote to the degreasers from the TCE storage tank.

Q: Can you recall any times when TCE was spilled?

A: No.

Q: Where were the vapor degreasers located?

A: Prior to 1983, there was an old vapor degreaser near machine number 146 on 19 NW 11th Avenue in the middle of the shop. Post 1973, two vapor degreasers, one at 19 NW, 11th Avenue middle of the shop, and one at the west end half way through the middle of the shop. The old plating shop's south wall was about 12 feet north into the shop.

Interview on August 10, 1995 with present shift operations leader.

Q: What is your position?

A: Works 2nd shift - 2 p.m. to 2 a.m., runs 3rd shift operations.

Q: What can you tell us about the plating department?

A: Plating used to be wooden catwalks and dirt floors and no filtering system. Everything went through the sewer to the river.

Q: Was plating moved?

A: Plating was moved about 12 feet and went almost to Holly Avenue. It did not go the entire way to Broadway.

Q: How were wastes removed?

A: Everything was hauled to the west of the building.

Q: Was old plating above or below ground?

A: Old plating was above ground.

Q: In what areas was TCE used?

A: TCE was used in the following areas:

- The paint shop on 2nd, 3rd, and 4th Avenue from at least 1968 until the early 1970's when the shop moved out of the area.
- The east end of 13th Avenue stored paint. Painted core molds from at least 1968 until early 1970's.
- At 10th Ave west and Broadway (Location of SWMU 24-Vapor Degreaser from the United Defense Record Drawing-Former Solid Waste Management Units, June 23, 1995) there were 200 to 250 gallon TCE tanks. There were 2 to 3 tanks which consisted of heat degreasers and vapor degreasers.
- There were portable wash tanks all over the plant that could be used. A crew came around and cleaned the portable TCE tanks:

- In 1956 they used to clean gun barrels on 21st and Broadway about 3 posts or 75 feet outside of the wall. Not sure if TCE was inside the tanks or 1,1,1-TCA. There were 2 big tanks the size of the gun barrel set up on the floor.

Q: Can you remember any spills?

A: The paint shop used to have lots of leaks in the area. On 3rd Avenue a lot of holding tanks were located from about 10E to 6th and 5th Avenues were leakage and dumpage occurred. In an area at the south east of the building the degreased parts were pulled out of the tanks to paint. There was an old TCE tank at the end of plating. They would Dump parts in the tank and pull the parts out. In assembly there were wash tanks that were rolled around. The tanks were 4 feet long by 2 feet wide and could hold 30 to 50 gallons of TCE. Sludge would fill up in the bottom of the tanks and then would be pumped out.

Interview on August 10, 1995 with present employee.

Q: Can you remember any locations where TCE was used?

A: There were portable TCE tanks (small wash tanks) in the southwestern side of the building. In the assembly room in the northeastern corner, no recollection of degreasers.

Q: Do you know what the can wash was used for?

A: Probably used to wash out cans from the cafeteria.

Q: Has the cafeteria ever been relocated?

A: The cafeteria was always in the same location.

Q: Has anything else been relocated?

A: The assembly area used to be around 7th Avenue and 10E and 19E. It was used for gun assembly in the early 1960s. They could have used small portable tanks which could have had splash-over.

Q: How does a vapor degreaser operate?

A: The vapor is heated to about 180 degrees. There is minimal spillage on the concrete surface due to the pulling out of parts and TCE being held in the crevices on the part.

Q: Was there anything in the paint shop that collected spills?

A: There was a concrete sump in the bottom of the paint shop?

Interview with past contractor on August 23, 1995.

Following was discussed:

1. He worked as a contractor from 1965 on.
2. In early 1950's there was a pit north of the building where drum dumping activities occurred. However, the United Defense Record Drawing-Former Solid Waste Management Unit Locations, June 23, 1995, provided as reference is different from what he remembers.
3. Another pit was located on the south side of the plant where drum dumping activities occurred. May be partially under the parking lot.
4. The pit on the north side of the building was located north of the parking lot. The pit was gone before 1965. Hyman Micheals (Chicago) in 1965 removed the shed which covered the gun mounts. The oil in the recoil mechanisms went onto the ground (south side of gun sheds). The gun mounts were on slabs. A new metal building was built over the slabs (1,200 gun mounts). These are the sheds which were removed by Richards company. He believes that the current building number 50 is a building which has since been built over the concrete slabs.

5. East River Road on west side of road - had steep slope towards River. There was a storm sewer system that ran from the plant towards the river. It has all been filled in and regraded around 1970. The park apparently exists at this place. The white house (Rydell house?) on the park side was the only part that was even with East River Road. The sand which was used as fill came from the mining of soil located west of the plant. The mining was for silica sand. When they closed the mine, they hauled the remaining silica sand to the west side of East River Road. This was later turned into Great River Road Park.

Interview with retired employee and Environmental Control on August 23 1995.

Retired employee provided the following information:

1. He started working at the plant in 1957.
2. His job consisted of maintenance (i.e., welding, repairs, cement work, etc.)
3. The plating shop as he remembers it was concrete lined.
4. He did not work with TCE.
5. He stated there were gun assembly pits along 3rd, 4th and 5th Avenue. The pits were concrete vaults used to assemble guns.

Environmental Control provided the following information:

1. In the 1970s, the electric assembly had a pit which was lined with rubber and was used for gun assembly as a plating bath. The sump would receive wastewater through pipes which led to the sump. After wastewater collected in the sump, it would be pumped out and transported to plating.
2. The TCE tank (T-2) located near west plating had an underground fuel line which led to west plating.
3. The sanitary sewer as it exited the plant, ran into a 96-inch diameter interceptor approximately 1 mile down the road which was a municipal line receiving wastewater from the neighboring communities and eventually to St. Paul.
4. When asked about the drywells, he replies: The dry wells were installed so that if a spill occurred, it would drain into the dry well and eventually the soil.
5. Location of SWMU 23-Dry Well from the United Defense Record Drawing-Former Solid Waste Management Units, June 23, 1995, does not have a concrete bottom, it is covered with soil. A soil boring was drilled to the water table at the former dry well location in the 1980's. Data is available.
6. There is a sump near the location of SWMU 26-Dry Well from the United Defense Record Drawing-Former Solid Waste Management Units, June 23, 1995, that was not lined. There were underground lines which carried methanol to the sump. A soil boring was drilled and methanol was detected in the soils.

Interview conducted with current machine repairman on August 24, 1995.

Following was discussed:

1. He is a machine repairman that has been with the company since 1966.
2. He would use degreasers to clean broken parts that would be repaired by welding. On average, one part per week per guy would be cleaned. There used to be 72 guys.
3. There was a spill of 600 gallons of TCE to the sanitary sewer near plating. TCE was poured down the floor drain. The TCE that was dumped was reportedly seen at the interceptor of the sanitary sewer at the lift station which pumped into the municipal sewer one mile down the road.
4. The TCE stations did not move much. Stayed in the same place.
5. There was no dumping of TCE around the welding area (14th to 15th Avenues).
6. There is a wet well and sump at two areas currently in use:

- a. 6 NW 6th Avenue;
- b. 12 NE 6th Avenue.

They are both 3 feet by 5 feet concrete vaults. A steel tub approximately 1 foot in diameter, 5 feet deep existed in each vault. The tubs held machine oil which would be pumped out above ground to a machine to wash off parts. Then gravity would drain the oil back into the tub. Both wet wells have been active since 1968-70.

7. He has asked the machine crew (everyone has 25 years or more experience) if any other sumps exist and they replied - No.

Interview with current painter on August 24, 1995.

The following was discussed:

1. He started working at NIROP in 1968 as a painter.
2. He dealt with the TCE tanks in the paint shop (Location of SWMU 1-Vapor Degreaser from the United Defense Record Drawing-Former Solid Waste Management Units, June 23, 1995) located in a cement pit - did not remember them leaking. He stated that water to cool the tanks was sometimes shut off, for whatever reasons, causing fumes of TCE to leak. They (the vaults) have since been filled with sand and cement. The TCE tanks were 250 gallon tanks. He does not know why they were removed.
3. There were vapor degreasers (small-above ground) at:
 - a. 3rd Avenue NE 8;
 - b. 3rd Avenue NE 9;
 - c. 1st Avenue SE 30 - large degreaser possibly below ground.

Site visits conducted on August 8 and August 10, 1995 with Environmental Control Technician.

United Defense created a map (Record Drawing-Former Solid Waste Management Units Locations, June 23, 1995) of the NIROP Fridley Main Industrial Plant Building and surrounding area, showing locations of potential concern which were referred to as Solid Waste Management Units (SWMUs). A site visit was conducted to view the SWMUs and to gather information on the history of the areas.

SWMU 28 - Dry well located in the sword Area. Dry well located on 3rd Avenue between 27th SE and 25th SE. The well was used to collect regular test water used for hydraulic testing. Mass amounts of water were used for testing the equipment - the water was recirculated. Two sumps in area that are separated.

SWMU 30 - Dry well located outside or the building near door 51.

SWMU 29 - Dry well which is filled in. Location not seen in field. It is unknown where property line ended in the past. There is new concrete for the storm sewer on the east side of the building.

SWMU 27 - Incinerator.

SWMU 25 - Sludge pit - location is unknown. There is a storm sewer manhole located on one side of the area between the bays of building.

SWMU 26 - Dry well. New concrete in area. Location unknown outside of building. There were four 20,000 gallon fuel oil storage tanks outside boiler facility. Pulled and removed 5 years ago. Wells and borings taken in area.

SWMU 23 - Dry well located near door 30 opposite side of courtyard near jut-out of building. Opened previously - sand filled.

SWMU 22 - Magnetic separator location not seen in field. General area near corner of fence at 21 SE 15th Avenue.

SWMU 24 - Vapor degreaser location on wall of building between 3 NW 10th Avenue and 4 NW 10th Avenue. Sump has been filled in with concrete. Non-destructive testing area.

SWMUs 19 (Vapor Degreaser), 20 (Vapor Degreaser), and 21 (Sump Pit) are within East Plating.

SWMU 18 - Dry well. Bay West did a remediation of the wet well. They dug out sections and took soil borings. Also at the shavings loading ramp, soil was removed. Area near door 81.

SWMU 17 - Shavings loading ramp. Trench drain.

SWMU 12 - Waste compactor. Old location of compactor. The location is currently used for storage of hazardous materials.

SWMU 10 - Trichloroethylene Tank. Near location of incinerator. Exact location is unknown by him. Currently a coolant recycling area between 31 NW 12th Avenue and 31 SW 12th Avenue.

SWMU 11 - Vapor degreaser in the Foundry. Currently the non-destructive testing area at 3 NE 19th Avenue and 3 SE 19th Avenue. The vapor degreasers sat on timbers at floor grade with a sump below them. A portion of the sump still exists. When water drained into the sump, a filter with activated carbon (55 gallon drum filled with carbon) was used to treat the liquid. The liquid in the sump was discharged to a sanitary sewer after going through the carbon filter. The unit was still in operation between 1984 and 1988. He does not know the activities that occurred prior to 1984. TCE was used in the degreasers prior to 1987 (year changed).

Unnumbered Site - TCA was stored, or TCE prior to TCA use, in a secondary containment area. This area is located east of the building, outside near building 21a. During 1987 through 1990 this area was used for TCA storage. Prior to 1987 this area was used for TCE storage. Now the area is used as a secondary containment for diesel fuel.

SWMU 7 - Oil/water separator sump. The location is now used as a scrap shed. All machine turnings/shavings are stored in hoppers until they are removed. Sometimes old coolant or oil was associated with the shavings. The capacity of the oil/water separator is 800 gallons. At one time the separator liquids were pumped up into a sewer. The liquid was pumped manually and consisted of coolant oil. The only source to oil/water separator is from leakage due to hoppers that are stored in the area. Two floor drains are located on the east side of the area. Water runs into these floor drains and then into the sump tank. A trap in the tank is used to make sure that the oil is in the drain and not pumped out. Once every nine months the trap is pumped out. About four years ago the piping was disconnected. He is not sure of where or if it was pumped out previously - went to a sanitary sewer prior to 1991 but not sure which sewer line. The area has always been used for the same function. The facility has a permit to discharge coolant to the sanitary sewer. The scrap shed was possibly modified in the mid 1980's. In general, the facility is not operated at full capacity.

SWMU 6 - Shavings loading ramp. Located in grass area - exact location unknown. Used as a shavings loading ramp. He is not sure if the area was used to load rail cars with shavings.

Dry Well - It was cleaned in 1990 and they pulled out oily wastewater. The drywell is structurally intact. Located next to the building on the other side of the railroad tracks. It is located on the east side of the north end of the building.

Concrete pad - Drums were stored at the northeast building corner, near the fence line. Fuel drums were stored on a pad with a sump. The area stored electroplating solids in 1984 on the pad.

SWMU 8 - Can Wash. He does not know about this area. From the maps it looks to be between 11 SE 24th Avenue and 12 SE.

SWMU 3 - Wash rack sump. Still Active. Naphthalene spray booth. Bay West did a couple of borings in the Mid 1980's. The sump integrity was questioned. He does not know if TCE was ever involved with the operations conducted in the area. There is a drain in the middle of the floor that goes to the sump.

SWMU 1 - Vapor degreaser. Located on the opposite side of SWMU 3. The foundation has changed in the area. The area is now used as 2 paint booths. The vapor degreaser was thought to have leaked all the time. It was removed about seven years ago. It was below ground. Between 1978 and 1980 the degreaser was in operation. The approximate capacity of the degreaser was 200 gallons.

SWMU 5 - Cyanide storage. The area is used to store controlled non hazardous wastes now. The site no longer exists. The cyanide was stored in drums on pallets from 1973 to 1988. There was no storage on the site in 1988 or after this date. Several cells in the area were used for storage. Cyanide was stored in the first cell.

SWMU 4 - Oil/solvent storage room. Flammable materials storage area. Area no longer exists. Stopped use in 1990-1991. Drums were stored on their side in racks. A mixing paint area and storage area is located on the left side of the flammable materials site.

Conversation with Environmental Control on August 9, 1995.

1. There will be no manifests before 1982 for waste disposal. This is when RCRA started and disposal was not regulated before this time.
2. The only purchase records he can obtain date back to 1969. Before 1969, he cannot provide records.
3. Before 1969 waste disposal activities occurred south of the plant. In 1969, these activities ceased and a company was hired to dispose of waste. However, this did not include drums. In 1972, a contractor was hired to remove drum wastes offsite.
4. The sewer lines south of the plant were disturbed due to landfill activities and were therefore resleaved.
5. The incinerator was shut down in 1969 (Location of SWMU 27-Incinerator Charging Room from the United Defense Record Drawing-Former Solid Waste Management Unit Locations, June 23, 1995.).