

Notes on the August 27th 2009 Hooker Chemical meeting

Beginning in late May or early June 2009 the membership of the Hicksville Gardens Civic Association began to notice an increase in activity on the property formerly known as Hooker Chemical located east of New South Road just north of the LIRR. The Association was not made aware of any planned activity on this site. About six years ago the buildings that once stood on this site were demolished with the same disregard. At that time concerns were raised regarding asbestos abatement and the community's exposure to airborne containments. When our local politicians were approached and asked why no one was made aware of the current effort they responded "What do mean? Everyone knew about it. There were meetings about it and everyone was on board"

I have been a member of the Hicksville Gardens Civic Association since 1999 and President since 2003 and at no time was I ever invited to a meeting that discussed clean-up efforts on this site. The site and the issues that surround it demand that the community be aware of what is going on. We all know that the Former Hooker Chemical property is a Federal Super Fund Site. We all know that this site and many others within the Hicksville and Bethpage community were allowed to operate for years before being condemned. Why is our community not being informed and kept in the loop?

State Assemblyman Rob Walker was the only elected official who immediately responded to our inquiries in writing however I believe it is our responsibility to educate ourselves as to the history of this site and the impact any activity or future development on this site will have on our community.

The clean up currently under way is being performed by the Bayer Corporation in an attempt to hopefully sell the property. In order to make the property marketable the toxic soil from this site must be removed. The soil is being removed in gondolas via the Long Island Rail Road. In early July three of those gondolas derailed on the New South Road Railroad crossing. To my knowledge no soil was spilled however the question remains, why weren't we contacted?

I asked our Second Vice President Deborah Strube to reach out to the State DEC and the Regional EPA to invite them to our August 27th Block & Board. The following is a brief summary of that meeting:

The Grumman property remediation is overseen solely by the Department of Environmental Conservation. The Hooker Chemical site is overseen by both the United States Environmental Protection Agency and the Department of Environmental Conservation. The EPA oversees the ground water remediation and the DEC oversees the Soil remediation.

Alicia Barraza & Tom Taccone, both Environmental Engineers from the Bureau of Radiation & Hazardous Site Management Division of Solid & Hazardous Materials represented the State DEC. Kevin M. Lynch Chief of the Western New York Remediation Section represented the United States Environmental Protection Agency. We were first given a brief history of the site.

History: (EPA/ROD/R02-94/235 1994 EPA Superfund Record of Decision: HOOKER CHEMICAL & PLASTICS CORP./RUCO POLYMER CORP. EPA ID: NYD002920312 OU 01 HICKSVILLE, NY 01/28/1994)

The Hooker/Ruco Site was developed by the Rubber Corporation of America, a small privately held company. Operations at the Site began in 1945 and included natural latex storage, concentration and compounding. Five years later the company began producing small volumes of plasticizers. These activities were expanded and modified through the years. In 1956, a polyvinyl chloride plant was built and was initially operated under the name of Insular Chemical Corporation. At that time the two companies, Insular Chemical Corporation and the Rubber Company of America occupied the Site. Although they were two separate corporations, they shared the same pilot plant. The two companies eventually merged

into the Rubber Corporation of America. In 1965, the company was purchased by the Hooker Chemical Company and was known and operated as the Ruco Division. The Hooker Chemical Company has since undergone several name changes, with the current name being Occidental Chemical Corporation (Occidental or OCC).

In 1982, the employees of the Ruco Division bought the company from Occidental and it became known as the Ruco Polymer Corporation (not affiliated with Occidental Chemical Company). Since 1946, the facility was used for the production of various polymers, including polyvinyl chloride (PVC), styrene/butadiene latex, vinyl chloride/vinyl acetate copolymer, and polyurethane, as well as ester plasticizers. The January 28th 1994 report noted that the facility was still currently active at the time and , and manufactured such products as polyester, polyols and powder coating resins. During Site operations between 1956 and 1975, industrial process wastewater and stormwater runoff from the facility was discharged to six (6) on-site recharge basins or sumps. This wastewater contained, among other things, vinyl chloride, trichloroethylene, barium and cadmium soap, vinyl acetate, organic acids, and styrene condensate. Drums containing various chemicals were also stored on-site where occasional spills would occur.

As a result of these releases, groundwater beneath and down gradient from the Site has been contaminated. Limited areas of residual soils contamination exist above levels that would be considered protective of groundwater quality. At the time of the report only non-contact cooling water is discharged into sump four and sump three collects surface water runoff. From 1975 to 1991 a concrete settling basin was used to store ester waste prior to being incinerated on-site. Ester wastes were stored in an on-site, above ground tank prior to off-site disposal or incineration on-site. Hazardous wastes were stored in drums on-site until they are disposed of at a permitted off-site facility. From 1946 to 1978, the pilot plant used a heat transfer fluid called Therminol, which contained PCBs. During the operation of the facility, there was a release of PCBs to the soil adjacent to the pilot plant. Some of this contaminated soil was spread to surrounding areas by surface water run-off, sediment transport, and truck traffic. Occidental has conducted several investigations, since 1984, to determine the extent of PCB and other soils and groundwater contamination at the Ruco Polymer plant. In 1989, an underground fuel oil storage tank adjacent to Plant 1 was removed, and the soils surrounding the tank were excavated, sampled, and found to be contaminated with PCBs. These excavated soils were covered with plastic sheeting, pending the remediation of the other PCB-contaminated soils on the Site. Initial investigations were started at the Hooker/Ruco Site in 1978. Originally efforts were directed towards understanding past manufacturing processes, waste generation and disposal. A Site background report was prepared in 1981. This report presented the Site in the context of its surroundings and examined waste disposal, regional geology and hydrogeology, and regional water withdrawals and water quality. At that time the New York State Department of Environmental Conservation (NYSDEC) was the lead government agency. A work plan for conducting a soils and groundwater investigation was submitted to the NYSDEC in 1983. This work plan was approved in 1983 and the investigation commenced. The investigation consisted of installing and sampling six (6) groundwater monitoring well clusters at locations down gradient of suspected areas of waste disposal, the drilling and sampling of two deep test borings in formerly active sumps, and drilling and sampling four shallow borings in the vicinity of the reported Therminol spill. The results of this study were presented in a report entitled "Report of Groundwater & Soils Investigation at the Former Ruco Division Plant Site, Hicksville, New York", dated August 1984. These initial investigations led to the Site being placed on the National Priorities Ust (NPL) in 1984. The full report can be accessed by clicking on the site below

<http://www.epa.gov/superfund/sites/rods/fulltext/r0294235.pdf>

In March 1985, four additional borings were drilled and sampled in the Therminol spill area, and in May 1985, a second round of groundwater samples was obtained. The results of these investigations were presented in a report entitled "Report of Groundwater & Soils Investigation at the Former Ruco Division Plantsite, Hicksville, New York: Second Round of Sampling", dated February 1986. From 1986 through September 1988, several sampling programs were undertaken to further define the extent of PCBs in the shallow soils around the pilot plant, and in soils excavated during the underground storage tank removal. The results of these programs were presented in progress reports dated January 1987, July 1987, December 1987, February 1988 and June 1988. These data are summarized in the "Focused Feasibility Study for Remediation of Soils Containing Aroclor 1248" dated August 1989. In July 1988, EPA sent OCC a request for information on the Hooker/Ruco Site. A response to the EPA request for information was submitted in September 1988. Initially, negotiations by NYSDEC and EPA failed to reach a settlement with the potentially responsible parties (Occidental Chemical and Ruco Polymer) to conduct the Remedial Investigation/Feasibility Study (RI/FS) for the Site. Therefore, EPA issued a work assignment to its contractor, Ebasco Services Inc., to prepare a work plan and conduct the RI/FS. However, in September 1988, after the work plan was finalized, Occidental agreed to perform the work. OCC entered into an Administrative Order on Consent with EPA in September 1988. Subsequently, a Field Operations Plan, based on the Ebasco Work Plan, was submitted for EPA review in October 1988. In September 1989, RI/FS field work commenced. Field work was completed in February 1990 and a draft RI Report was submitted in April 1990. Portions of the RI Report pertaining to the PCB contaminated areas were approved to expedite the remediation of those areas. The final, complete RI report was approved in December of 1992. An FS outline for operable unit 1 (OU 1) was submitted December 18, 1992 containing the preliminary groundwater and soils treatment alternatives. The Draft FS was received April 17, 1993 and reviewed by the EPA and NYSDEC. The Revised FS Report was received on July 18, 1993 and the Final FS report was approved in August 1993. (We have asked that this final report be forwarded to the Association)

The RI Report, the FS Report, Proposed Plan and Responsiveness Summary, along with other Site related documents, provide the basis for this Record of Decision. In order to expedite action to deal with the most immediate human health threats at the Site first, separate distinct phases or "operable units (OUs)" were established. The OUs for this Site are divided as follows:

- OU 1: Covers the majority of the Ruco property; soil and groundwater contamination from previous disposal activities.
- OU 2: Addressed the PCB-contaminated soils.
- A third area of concern is the contaminated groundwater, downgradient of the Ruco property boundary.

Occidental proposed to perform an early action to remediate the PCB contaminated areas separately in 1989 (while the RI was underway). To support such an action, Occidental prepared a Focused Feasibility Study (FFS) which analyzed alternatives to address the PCB-contaminated areas on the Site. Given that the PCB-contaminated areas had been defined by previous investigations, and the technologies for treatment were different from the rest of the Site, the PCB excavation was designated as OU 2. OU 2 for this Site covered an area surrounding the pilot plant building and a portion of sump three which was contaminated by PCBs. A ROD addressing OU 2 was issued on September 28, 1990. The Special Notice letter for the implementation of the remedial design/remedial action (RD/RA) and the draft Consent Decree were sent to OCC and Ruco Polymer on December 20, 1990. A Good Faith Offer to perform the RD/RA and to enter into a Consent Decree was received from Occidental on February 27, 1991. A response was also received from Ruco Polymer, expressing their willingness to cooperate with EPA and

Occidental (Occidental has assumed responsibility for environmental matters at the Site). Occidental formally rejected EPA's offer to enter into a Consent Decree in a letter dated June 5, 1991. A Unilateral Administrative Order was signed by the Regional Administrator on June 27, 1991. Notices of Intent to Comply with the order were submitted by both Occidental and Ruco Polymer (both letters are dated July 16, 1991) and were received by EPA on July 17, 1991. Due to deficiencies in its original submittal, Ruco Polymer submitted a revised Notice of Intent to Comply (dated July 26, 1991). The RD/RA Work Plan Outline was received on May 13, 1991, followed by the RD/RA Work Plan (Remedial Design) in July, 1991. Final RD/RA Work Plan approval was given on April 24, 1992. Mobilization for the execution of the Remedial Action of OU 2 took place on May 4, 1992. All operations of the work were monitored by an EPA oversight contractor. Notice from Occidental for Final Inspection was received on July 22, 1992. An Inspection visit was made on September 3, 1992 at which time all restoration was completed.

Occidental's Remedial Action Report was received on October 19, 1992 and final approval was issued on March 12, 1993. This concluded the activities associated with OU 2. Upon completion of the Remedial Action of OU 2, four areas of PCB contaminated soils surrounding the pilot plant were addressed. They were: 1) the direct spill area; 2) transport related areas; 3) the previously excavated soils; and, 4) the impacted recharge basin (sump three) (See Figure 3). The volumes of PCB-contaminated soils that were removed during the Remedial Action of OU 2 were as follows:

10 ppm - 500 ppm = 3,230 tons (1,957 cu.yds.)

500+ ppm = 85.2 tons (52 cu.yds)

HIGHLIGHTS OF COMMUNITY PARTICIPATION

The RI report, FS report, and the Proposed Plan for the Site were released to the public for comment on August 23, 1993. These documents were made available to the public in the administrative record file at the EPA Docket Room in Region II, New York and the information repository at the Hicksville Public Library, 169 Jerusalem Avenue, Hicksville, New York. The notice of availability for the above-referenced documents was published in the Nassau County edition of "Newsday" on August 23, 1993. The public comment period on these documents was held from August 23, 1993 to September 22, 1993. As per a request, the comment period was extended 30 days to October 22, 1993.

On September 8, 1993, EPA and NYSDEC conducted a public meeting at the Hicksville Elks Lodge, No. 1931, 80 East Barclay Street, Hicksville, New York to inform local officials and interested citizens about the Superfund process, to review current and planned remedial activities at the Site, and to respond to any questions from area residents and other attendees.

Responses to the comments received at the public meeting and in writing during the public comment period are included in the Responsiveness Summary (see Appendix v).

This can again be viewed by clicking on the link below and by scrolling down to page 149.

<http://www.epa.gov/superfund/sites/rods/fulltext/r0294235.pdf>

In brief, the meetings that our local elected officials were referring to happened sixteen (16) years ago.

The EPA held its first public meeting on September 8, 1993 at the Elks Lodge, Hicksville, New York. Only 55 residents and local officials attended the meeting. Kevin Lynch, Section Chief, Superfund, Western New York Section II; Dale J. Carpenter, Hooker/Ruco Site Remedial Project Manager; and Ann Rychlenski, Region II Community Relations Coordinator represented EPA. EPA contractor personnel were represented by Stuart Fiedel, ARCS II Community Relations Specialist. Ms. Rychlenski opened the meeting and explained that the purpose of the informational meeting was to discuss the remedial alternatives considered for the Site and to present the EPA's preferred remedial alternative for cleanup of

the Hooker/Ruco Site. She stressed that public input into the process of choosing remediation for a site is very important and encouraged all to comment either verbally or in writing during the comment period. Ms. Rvchlenski also informed the group about the Technical Assistance Grant Program.

A Technical Assistance Grant (TAG) provides money for activities that help your community participate in decision making at eligible Superfund sites. An initial grant up to \$50,000 is available to qualified community groups so they can contract with independent technical advisors to interpret and help the community understand technical information about their site.

Congress made public involvement in decision making an important part of the Superfund process when the program was established by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. Congress wanted to ensure that the people whose lives were affected by abandoned hazardous wastes would have a say in actions to clean them up. The role of community members in the Superfund process was further strengthened in the Superfund Amendments and Reauthorization Act of 1986 (SARA). With SARA, Congress created EPA's TAG Program. TAGs are available at Superfund sites that are on the EPA's National Priorities List (NPL) or proposed for listing on the NPL, and for which a response action has begun. EPA's NPL is a list of the most hazardous waste sites nationwide. Since the first TAG was awarded in 1988, more than \$20 million has been awarded directly to community groups.

I don't believe our community ever received such a grant and would like to get a couple of volunteers to research this topic and find out what we as a community need to do to secure such a grant. Getting back to the meeting that was held (16) years ago, Ms. Rychlenski introduced Councilman Clark and thanked him for his assistance in getting the Elks Lodge for the meeting; John Barnes (New York State Department of Environmental Conservation); Anthony Sabino (Bethpage Water Commission); Lloyd Wilson (New York State Department of Health); and Bruce McKay and Lori Lutzger (Nassau County Department of Health); and Town of Oyster Bay Supervisor Lewis Yevoli. Where our State and Federal were elected officials?

Ms. Rychlenski then turned the floor to Mr. Kevin Lynch. Mr. Lynch discussed the Superfund law (Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA]), why it was enacted and how it sets out the rules to address Superfund sites. Mr. Lynch discussed the National Priorities List (NPL) and how a site qualifies to be placed on the list through the Hazard Ranking System (HRS) process. The initial examination of a site is called the Remedial Investigation (RI) wherein the nature and extent of site contamination is determined. Samples of soil, air, sediment, surface water, and groundwater are collected and analyzed by EPA-approved laboratories. EPA then evaluates the potential risk to human health and the environment of the contaminants detected at a site through the performance of a Risk Assessment. EPA also evaluates the potential routes through which flora or fauna may come into contact with these contaminants. At the next stage of investigation, the Feasibility Study (FS), EPA develops a number of alternatives to remediate site contamination based on the established criteria. EPA uses nine criteria to evaluate the remedial alternatives. These criteria are:

- Overall protection of human health and the environment
- Compliance with applicable or relevant and appropriate requirements (ARARs)
- Long-term effectiveness and permanence
- Reduction of toxicity, mobility, or volume through treatment
- Short-term effectiveness
- Implement ability
- Cost
- State acceptance
- Community acceptance

EPA presents its preferred remedial alternative(s) for cleanup of the site in a Proposed Plan. The Proposed Plan is presented to state agencies and the public for review and comment. EPA evaluates the responses and factors them into its final selection for a site remedy. A responsiveness summary which addresses public comments is then prepared. This becomes part of the Record of Decision (ROD) which documents EPA's decision process. The Remedial Design (RD) is the next stage of site cleanup in which the selected remedy is detailed. The final phase is called the Remedial Action (RA) phase. This phase is when the selected remedy is implemented and the site cleanup actually occurs. Time frames for these activities vary according to the characteristics of the particular site. The RI/FS can take from 18-24 months; the RD takes between 12-18 months; the RA can take as long as 30 years if the remedy includes the pumping and treatment of contaminated groundwater. If the remedy is as simple as removing items such as drums, remediation can take as little time as six months to complete. Mr. Lynch also discussed EPA enforcement activities under Superfund, including the role of the potentially responsible party (PRP) in assuming responsibility for site remediation.

The Occidental Chemical Corporation and the Ruco Polymer Corporation are the PRPs for the Hooker/Ruco Site. Mr. Lynch then introduced Mr. Dale Carpenter. The program continued with Mr. Carpenter who presented a brief historical overview and physical description of the Site. Mr. Carpenter reported the results of the various testing conducted during the RI on samples from the Site. The results of the soil testing revealed a wide presence of low levels of contaminants.

The highest concentrations of contaminants were found in Sump 1. One surface location was found to contain possible elevated levels of tentatively identified compounds (TICs) and a second surface soil location was suspected to contain contaminants based on previous investigations. A PCB concentration was noted around the Pilot Plant. The soil vapor sampling resulted in no detection of any volatile organic vapors. The electromagnetic survey revealed the possible presence of buried objects in three locations. The groundwater sampling program revealed the presence of contaminants in the groundwater predominantly in the southern portion of the Site. Chloroethylenes, including trichloroethylene and dichloroethylene, commonly associated with solvent use, were found sitewide but with higher levels downgradient. Groundwater at the site was found to move from the north to the south. The air sampling at the Site revealed the presence of no hazardous chemicals above detectable limits at the site. Based on the results of the testing, Mr. Carpenter explained that EPA designated two Operable Units (OUs). The rationale for designating separate OUs was to address a portion of the Site's contamination which could be dealt with quickly. These OUs include: Operable Unit 2, the PCB-contaminated soils; and Operable Unit 1, the remaining contaminated soils on the site and the groundwater beneath the Site. Operable Unit 2 was completed in 1992. Operable Unit 1, which would take more time to remediate, is the topic of the public meeting. Mr. Carpenter said that the three areas which the electromagnetic survey indicated may potentially contain buried objects were to be the subject of exploratory excavations and removal (if necessary) early in September 1993. The exploratory excavations revealed the presence of three buried tanks in one of the areas previously identified. These tanks are scheduled to be removed in 1994. In addition, Mr. Carpenter indicated that EPA proposed to conduct additional exploratory soil excavations between Plant 2 and the Pilot Plant for further soil analysis. These excavations are not associated with the detection of the magnetic anomalies but are the result of the discovery of a tar-like substance uncovered during a routine utility trench excavation. A Work Plan to address these additional areas was expected to be approved by February 1994.

Mr. Carpenter then went on to describe the various proposed remedial alternatives presented in the FS and considered by the EPA. He explained that the various media (i.e. groundwater, the deeper soils, and the shallow soils) would all be addressed differently and required different technologies and techniques for cleanup.

B. SUMMARY OF REMEDIAL ALTERNATIVES

The alternatives which EPA considered focus on the groundwater, deep soils and shallow soils (Operable Unit 1). These were: Remedial alternatives to address the groundwater medium:

Alternative 1: No Action

Alternative 2: Deed Notations with Monitoring

Alternative 3: Groundwater Extraction and Treatment with Discharge to an On-Site Recharge Basin (Sump 3)

Alternative 4: Groundwater Extraction and Treatment with Discharge to Leaching Galleries

Remedial alternatives to address the deep soils:

Alternative 1: No Action

Alternative 2: Capping of Sump 1 (and Possibly Sump 2)

Alternative 3: Soil Vapor Extraction and Capping

Alternative 4: Soil Flushing

Remedial alternatives to address shallow soils:

Alternative 1: No Action

Alternative 2: Capping

Alternative 3: Excavation and Off-Site Disposal in a Landfill

Mr. Carpenter went on to explain that the various alternatives were evaluated using the nine criteria discussed by Mr. Lynch. Based on the information gathered for the Site, and the evaluation of the various alternatives, the EPA formulated a preferred alternative.

THE PREFERRED ALTERNATIVE

Mr. Carpenter then presented EPA's preferred alternative for the Hooker/Ruco Site Operable Unit 1.

Based upon an evaluation of the various alternatives, EPA and the NYSDEC recommend Alternative 3 (groundwater extraction and treatment with discharge to an on-site sump) for the groundwater, in conjunction with Alternative 4 (soil flushing) for the deep soils. Alternative 3, Excavation, is the preferred alternative to address the shallow soils. If all of the targeted areas are included (i.e., if Sump 2, and the area around monitoring well E contain contaminants above the cleanup goals), the total cost of the remedies for Operable Unit 1 would be:

- Capital Cost : \$5,531,000
- O&M Cost : \$552,000/year
- Present Worth Cost :
- 10-year present worth cost - \$ 9,031,000
- 30-year present worth cost - \$13,250,000

Specifically, the preferred alternative would achieve substantial risk reduction through the following actions: Control of the groundwater through the installation of groundwater extraction wells; Treatment of the extracted groundwater with an on-site treatment system to achieve the appropriate discharge standards; Additional soil testing in the bottom of Sump 2 to determine if contaminants are or are not present in the soils, and determine the need for treatment (as per Sump 1); Discharge a portion of the treated groundwater to Sump 1 and possibly Sump 2; Soil flushing for the deep soils in Sump 1 and possibly Sump 2 through the discharge of a portion of the treated groundwater. Reevaluate contaminant levels in the sumps in five-year review to determine effectiveness of treatment; Additional soil testing in the area around monitoring well E to determine if contaminants are present; Excavation of shallow soils in the former drum storage area adjacent to plant 2 and possibly in the area around monitoring well E; Periodic monitoring of groundwater extraction system to assure adequate control is maintained; and Placement of institutional controls in the form of deed restrictions and groundwater use restrictions at the Ruco property.

II. BACKGROUND AND COMMUNITY INVOLVEMENT AND CONCERNS

In 1976, public concern regarding pollution at the Hooker/Ruco Site began to be expressed when vinyl chloride contamination was detected in wells at the Grumman Aerospace Corporation facility, adjacent to the Site. In response to this and other potentially harmful site conditions, environmental action groups staged demonstrations at the Hooker/Ruco Site in an attempt to close plant operations. During this time period the Site was frequently linked in media accounts to the Love Canal Superfund Site in Niagara Falls, New York, since the Hooker Chemical Company owned both Sites. Long Island Newsday published a cover story on contamination at the Hooker/Ruco Site which represented the media's peak interest in the Site.

In the 1980s, as the public perceived that the NYSDEC was implementing a cleanup plan and monitoring program for the Site, community interest declined. Due to difficulties in negotiations between NYSDEC and OCC, the enforcement lead for the Site was transferred to the EPA. Upon receiving subsequent information that an RI/FS was planned for the Site (under EPA authority), citizens expressed surprise that Site cleanup activities were not yet underway. Similar public concerns regarding the perceived slow pace of Site remediation were expressed upon release of the Focused Feasibility Study (FFS) and the Proposed Plan addressing the PCB-contaminated soils in 1988. At the time of the release of the FFS and the Proposed Plan, the overall level of public involvement among area residents was markedly decreased compared to the initial levels in the 1970's and early 1980's:

A Final Community Relations Plan for the Hooker/Ruco Site was completed by EPA in July 1988. Input received at that time indicated that issues of concern to the community included: the potential for and extent of groundwater contamination; liability of Site owners; cleanup schedule and funding; and potential negative impacts on local property values.

The public meeting held on September 8, 1993 to present the Proposed Plan for OU 1 drew only a moderate to low public response with approximately 40 residents attending the meeting. The majority of individuals attending the meeting were residents and business owners who resided in the immediate vicinity of the Ruco facility. The predominant concern of the local residents regarding this Site pertained to air quality issues. The air quality issues are related to current operations at the Ruco facility and not related to the Superfund actions being implemented at this Site.

III. SUMMARY OF MAJOR QUESTIONS AND COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD AND EPA RESPONSES TO THESE COMMENTS

Issues and questions raised during the public comment period for the Hooker/Ruco Site are summarized below and are organized into the following categories:

Section A: Comments Received During the Public Meeting

- A. Groundwater Contamination
- B. Air Quality
- C. Other Concerns

Section B: Written Comments Received During the Comment Period

SECTION A

A. GROUNDWATER CONTAMINATION

1. COMMENT: A resident asked about the potential for PCB contamination in the soils at the Site to enter the groundwater.

EPA RESPONSE: The results of all groundwater sampling at the Site did not indicate the presence of PCBs in groundwater. This was expected as the physical and chemical properties of PCBs indicate that they are non-soluble and, as such, would not readily enter the groundwater. The PCBs at the Hooker/Ruco Site were removed as a result of the remedial action of OU 2.

2. COMMENT: A resident asked if anyone has tested the water in area homes.

NEW YORK STATE HEALTH DEPARTMENT RESPONSE: The residents in this area are served by three public water supplies: Hicksville, Levittown, and Bethpage. These water supply agencies are required by the New York State Department of Health to periodically sample the water. This regular testing of the water is done before it is distributed to local residents and prevents public exposure to contaminants in the water supply. The drinking water wells are regulated by New York State and Nassau County Department of Health. Lloyd Wilson of the New York State Department of Health confirmed that the public water supplies were required to be tested and were routinely tested, approximately monthly, by the Bethpage Water District.

3. COMMENT: A representative of an environmental group called for soil monitoring to determine if reverse migration up through soils from contaminated groundwater and into facilities that people inhabit and work at has occurred.

EPA RESPONSE: The EPA does not believe that volatilization of contaminants upward to the surficial soils from the groundwater is occurring at the Site due to the physical characteristics of the Site and the low VOC concentrations that exist in the groundwater. Mr. Lloyd Wilson of the New York State Department of Health indicated that, based on information he has seen, the upward volatilization would not have a measurable impact on indoor air quality when the aquifer is 50 feet deep such as is the case at this Site. Upward volatilization could, however, be a problem at locations where the groundwater is only 10 feet or less below the surface and soil conditions were permeable to volatile organic vapors. The soil vapor data collected for this and adjacent Sites indicates that upward volatilization of VOC vapors to surficial soils is not a concern. Groundwater quality data also suggests that contaminants are moving deeper into the aquifer, not upward.

4. COMMENT: A resident asked EPA to clarify the section of the RI/FS report which addresses a "future groundwater risk scenario."

EPA RESPONSE: EPA's Mr. Mark Maddaloni spoke at some length concerning the details of the Risk Assessment performed for this Site and, specifically the future groundwater use scenario. Since everyone is on municipal water there are no current risks, especially since that water is regularly monitored. EPA is required to also look at possible future risks. We look at the chemicals of concern, the exposure pathway, and the potential to drink this water for a long period of time (e.g. 30-year exposure). We look at the chemical, the type and extent of exposure, and the potency of this carcinogen. Based on this information, we make statements about the carcinogenic risk. EPA has determined that if the potential cancer rate is greater than one case in ten thousand over a lifetime, remedial action is generally appropriate. That is why EPA is taking action on the groundwater, because the excess risk was greater than one in ten thousand due to the potential future use by a resident of the most contaminated portion of the groundwater. In developing the risk numbers EPA makes very conservative estimates which means that in all probability the actual risk from the Site is no higher than the risk estimates presented in the Risk Assessment Report.

5. COMMENT: A resident asked about the cleanup goals for groundwater.

EPA RESPONSE: New York State has promulgated standards for groundwater quality, which are equal to or more stringent than EPA's standards, and these are the goals which EPA has set to clean up the groundwater. New York State also has standards for discharge criteria, which are also going to be applied in the process of treating the groundwater and then discharging it to a sump.

6. COMMENT: A resident asked if all of the testing of the community's drinking water was for bacteria and not for chemical and solvents.

EPA RESPONSE: EPA indicated that standard procedure is to test for bacteria and that in addition, a long list of chemicals are routinely examined in municipal groundwater supply wells, including solvents.

7. COMMENT: A resident asked if the limits of the off-site plume had been identified. The resident then asked who is responsible for cleanup of the plume.

EPA RESPONSE: The NYSDEC is the main agency responsible for the study of the off-site plume. A great deal of work is currently being carried out to accurately define the limits of the plume. Some preliminary work has been done by the United States Geological Survey. With information from the Hooker/Ruco Site, Grumman Site and the Navy Site being collected, a regional picture is emerging. Mr. Carpenter indicated that the general movement of the plume appears to be from north to south. EPA and NYSDEC personnel believe they have a good handle on the size of the groundwater plume. John Barnes of the NYSDEC said they were studying both the Grumman Site and the Navy Site and they anticipate having a meeting similar to this EPA meeting for the Navy and Grumman Sites. A meeting for the Grumman Site was scheduled to be held around the spring of 1994. (We need to get more information on this meeting and what was discussed).

Mr. Carpenter continued to say that "When a responsible party is identified, that party is responsible for cleanup from the beginning of the plume to the end of the plume. However, a problem with a large plume is that once it leaves a facility, it may mix with other plumes from other facilities. At this Site, when the plume of contaminants in the groundwater leaves the Ruco facility, it mixes with other contaminants in the groundwater from the Grumman and Navy Sites. All contributors to the plume are legally responsible for cleanup.

B. AIR QUALITY

The bulk of the questions and comments raised at the public meeting were focused on air quality concerns, the following summarizes the general questions received:

1. COMMENT: Many of the residents commented that there is a very bad, noxious odor in the area of the Site. EPA RESPONSE: EPA personnel acknowledged the odor. Mr. Carpenter indicated that he had been in touch with the Nassau County Department of Health about the smell. He assured the residents that the odor was non-hazardous and not a health risk. Mr. Carpenter indicated that jurisdiction over air emissions came from legislation to Nassau County through New York State and other divisions of the EPA. EPA indicated that noxious odors would be a violation of the nuisance portion of the NYS air regulations. EPA indicated that Ruco Polymer has been notified for this previously. After several inspections by the Nassau County Department of Health, they have referred the issue to the NYSDEC for action. A notice of violation of New York State's air regulations was issued by the Nassau County Department of Health. He also indicated that he was aware that Hooker/Ruco had taken many steps to employ new technology to try to reduce the odor emissions from the Site (e.g. rerouting their process vents and burning off the odors).

The smells may be coming from the Hooker/Ruco Site and may be due to ethylene glycol or some kind of a glycol, a substance which has a low odor threshold.

Kevin Lynch of the EPA indicated that regulation of air emissions from operating facilities is outside the jurisdiction of the EPA personnel present who are here to deal with the problems associated with past disposal areas at the Hooker/Ruco Site: The air monitoring conducted during the RI at the Hooker/Ruco Site indicated that there was not an air problem associated with these past disposal areas. The focus of the present study and meeting is intended to be on the Superfund Site, defined as a soil and groundwater contamination issue. Therefore, the Superfund tasks at the Hooker/Ruco Site focus on the disposal areas and their potential impacts. Personnel from the New York State Health Department agreed to transmit resident's concerns on the air quality to their experts. Mr. Carpenter indicated that the people to contact are those at the Nassau County Department of Health and the NYSDEC and then supplied the number of the Air Programs Office of the Nassau County Department of Health. EPA personnel also encouraged the residents to write to EPA's air compliance division. They assured the residents that letters and comments do elicit a response from the agencies contacted. Representatives of the Nassau County Department of Health indicated that they send out investigators to try and trace the odors to a source. EPA personnel encouraged the residents and concerned citizens to write their local officials and congressmen with their concerns on air issues. EPA indicated that the air testing had been conducted during the remedial investigation in August and September, 1989. More recently, within the past six months, the Nassau County Department of Health conducted a stack test at the Ruco facility.

Councilman Clark and Supervisor Yevoli, in the audience, volunteered to try to set up a meeting for residents with the state and county regarding the air quality of the area and what steps can be taken to deal with the problem. (I wonder if that was ever done)

C. OTHER CONCERNS

1. COMMENT: Several residents stated that a study should be made of the incidence of cancer among local residents or that a health study be performed.

EPA RESPONSE: EPA personnel indicated that the Agency for Toxic Substances and Disease Registries (ATSDR) is charged specifically with the conduct of community health surveys to see what impact may have occurred in a community. Some cancer studies for Long Island are currently being conducted and evaluated by other agencies. In response to this meeting, EPA did refer public concerns and requests to the ATSDR regarding a community-wide study.

2. COMMENT: A resident asked if Hooker/Ruco is presently operating without contributing contamination other than air odors.

EPA RESPONSE: EPA responded that discharge is no longer occurring to any of the sumps at the Site. Currently the waste is drummed and shipped off site.

3. COMMENT: A resident asked about the possibility of spills at the Site during the process of excavating and shipping waste off-site.

EPA RESPONSE: The EPA indicated that the excavated soil would most likely have to be removed by truck or rail car. If that were the case there are specific laws that govern the transportation of this kind of material. Also we would be dealing with a fairly small volume of material, so only one or two trucks would be required and they would be covered. There always exists a possibility that a spill could occur; however, disposal operations will be carefully monitored by the EPA and any spills will be properly cleaned up. (This statement proved false as the volume of material excavated has been substantial)

4. COMMENT: A resident asked how far the soil contamination extends on and off the property, and asked if soils on area residential properties can be tested. He was concerned that he and his family may be eating heavy metals by eating vegetables grown in his backyard garden.

EPA RESPONSE: The testing results from soils sampled on the Site indicated that the soil contamination is limited to specific areas on the Site. Metals, which were not really a problem on the Site, should not be a problem outside of the Site. The soil contamination at the Site is mostly related to the presence of organic chemicals in very specific areas. These organic chemicals then migrate into the groundwater, which represents the largest problem attributable to the Hooker/Ruco Site.

5. COMMENT: A resident asked if consideration was given to any type of bioremediation as a treatment alternative.

EPA RESPONSE: The feasibility study examined the bioremediation technology and screened it out during the screening process. This was because the relative concentrations of the contaminants in the soil were too low to provide sufficient "food" for the bacteria or enzymes to utilize. (This has also changed as we now know that oxygen is being pumped into the ground to promote bioremediation)

SECTION B

Written comments were received from Occidental Chemical Corporation (OCC) and the Ruco Polymer Corporation (Ruco) only. The following section summarizes the written comments received and EPA's response to those comments:

1. COMMENT: Both OCC and Ruco objected to EPA's proposal to locate a sump in the northwest corner of the Ruco property to receive the discharge of a portion of the treated groundwater for a variety of reasons. Both OCC and Ruco requested that the existing Sump 3 (located on the eastern property boundary) be used for the discharge of treated groundwater as was presented in the FS. OCC and Ruco argued that locating the sump in the northwest corner of the Ruco facility would possibly interfere with future development of that portion of Ruco's property. Ruco also felt that locating a sump in the northwest corner of the property would create a security problem by attracting potential trespassers. OCC also felt that it would be imprudent to discharge treated groundwater in the northwest portion of the Ruco Polymer facility because: 1) this area has not been impacted by past waste storage or handling; and 2) if the treatment technology does not achieve ambient levels of all plume constituents, Site indicator compounds may be released to the groundwater at levels which may meet current standards, but which may not meet future requirements. OCC has suggested the ROD not specify a discharge location for the treated groundwater.

EPA RESPONSE: After review of the FS and the various discharge options for the treated groundwater, the EPA and NYSDEC believe that discharge to Sump 3 on the Ruco facility is not an acceptable discharge option. Due to the dynamics of the hydrogeology EPA and NYSDEC believe the discharge of the treated groundwater should be located as far as possible from the area of influence of the proposed pumping wells. By discharging to sump three, the pumping system, which is designed to prevent further downgradient migration of contaminants in the groundwater, will be overwhelmed. A proper capture zone created by the pumping wells would not be able to be maintained with the continual recharge in an area immediately adjacent to or above the capture zone. This is one of the reasons the EPA proposed the area in the northwest corner. The optimum location for the discharge of the treated water would be somewhere beyond the area of influence of the pumping wells. Because all of the potential discharge location options may not have been fully developed, and Ruco may want to develop portions of their property at a later date, the EPA will provide flexibility in the ROD language that will allow for an alternate discharge location to be determined during the remedial design phase.

2. COMMENT: OCC contends that since treatability studies to determine the effectiveness of various groundwater treatment technologies were not performed, it is unknown if available technologies will be able to achieve ARARs in the groundwater or meet the SPDES requirements. Therefore, OCC believes cleanup goals and discharge criteria should not be specified in the ROD but should be assessed in the remedial design phase.

EPA RESPONSE: The NCP requires that the cleanup goals be established for CERCLA sites using all ARARs when they exist. The ARARs are legally established standards or criteria that are used as cleanup goals that are to be achieved through remedial actions at a site. The RI/FS is required to identify these ARARs which are then used as cleanup goals at a site. At the Hooker/Ruco Site, the ARARs for groundwater are clearly established and specified in NYSDEC's groundwater quality and groundwater discharge standards, 6NYCRR. These standards will be used as cleanup goals and discharge standards unless it is demonstrated that, under very specific criteria, the standards cannot be achieved. Based on review of all the available information, the EPA believes that the cleanup standards and discharge criteria, established through ARARs for this Site, are achievable. However, the EPA does acknowledge that some uncertainties do exist in the ability of the selected remedy to achieve the groundwater cleanup standards and the discharge to groundwater standards. These uncertainties are identified in the Selected Remedy portion of the ROD and elsewhere. Due to this uncertainty the EPA concurs with OCC on the need for treatability studies during the design phase to more accurately determine the effectiveness of various treatment technologies for groundwater and the potential to achieve the discharge standards. Treatability studies have been specified in the Selected Remedy section of the ROD. The EPA believes the results of the treatability studies will indicate that an adequate treatment system can be designed to meet the discharge standards. If the treatability studies indicate that the discharge standards are impossible to achieve through currently available technologies, then the selected remedy would have to be revisited by the agencies. The Selected Remedy Section of the ROD acknowledges this. If, during the operation of the groundwater pump and treat system, it becomes evident that the groundwater cleanup standards in the aquifer cannot be attained, a number of contingent responses are possible. These contingencies are also indicated in the Selected Remedy section of the ROD.

3. COMMENT: In several comments OCC asserts that the shallow soils should not be included in the Site remedy because: a) no risk has been assigned to the soils, b) any chemicals exceeding the "to-be-considered" (TBC) protection of groundwater standards would leach to the groundwater, under the no action alternative, and would be captured by the groundwater extraction system which would lead to the attainment of the TBC criteria.

EPA RESPONSE: OCC's assertion that "no risk" has been assigned to the Site soils *is incorrect*. Part of the risk assessment performed for this Site examined the potential risks to workers at the Ruco facility, trespassers and potential future construction workers at the Ruco facility from exposure to compounds in the soil, surface water and sediments at the facility. Risk calculations were made for each of the potentially exposed individuals. These risk calculations were performed for each individual's exposure to the various media at the Site (i.e., soil, sediment and surface water). A quantifiable risk was determined for each of these scenarios. The highest carcinogenic risks attributable to exposure of Site soils were to the workers at the Ruco facility.

The carcinogenic risks were 4.93×10^{-5} for ingestion, 4.23×10^{-9} for inhalation and 4.52×10^{-5} for dermal contact. While this risk value may be within EPA's "acceptable" risk range, it does not mean that there is "no" risk assigned to the soils. EPA's concern regarding the risks from soil at the facility are due in part to the role of the soil risk in the cumulative, cross-media risks that a worker may incur at the Site. The cumulative risk is calculated by the addition of the risks from each particular medium to a particular individual or group (i.e., Site workers). The cumulative risk to Site workers was calculated to be 2.05×10^{-4} , which is at the high end of the EPA's acceptable risk range. This risk, which includes the soil risks, is a cause for the EPA's potential concern. The human health risk posed to Site workers by the shallow soils,

alone, was not the major factor in determining the need to address the shallow soils. Based on initial soil tests, the shallow soils in the two areas specified in the ROD (the former drum storage area, particularly at TB-10; and the area at monitoring well E), indicated the presence of compounds at levels above that which is considered protective of groundwater (TBC criteria). These soils could potentially spread to contaminate the deeper soils and eventually the groundwater. This necessitates that the shallow soils be addressed. OCC then contends that the shallow soils be remediated through the application of the no action alternative which would eventually lead to the attainment of the TBC soil criteria. The EPA and the NYSDEC do not agree with this contention. By allowing the compounds in the shallow soils to leach downward into the deeper soils and potentially the groundwater, the area of contamination would increase and would be equivalent to an unabated release. This further contamination of the soils and groundwater is unnecessary and unwarranted. By actively remediating the shallow soils a permanent, effective solution with far fewer uncertainties than no action, can be achieved. EPA's evaluation of the nine criteria with respect to the various shallow soil remedial options indicated that the long-term permanence and effectiveness of the soil excavation alternative was superior to the other alternatives considered. The NYSDEC and the EPA continue to believe that soil excavation for shallow soils is the preferred alternative based on the evaluation criteria. However, the EPA does believe that some uncertainty exists regarding the reliability and accuracy of the soil data collected in the two shallow soil areas of concern. Therefore, further soil sampling shall be required during the pre-design or design phase to more accurately characterize these areas.

4. COMMENT: OCC suggests that the ROD state: "...all of the groundwater which emanates from the Hooker/Ruco Site is, and has been captured by the Grumman wells." OCC believes that this concept has been definitively demonstrated by the United States Geological Survey (USGS) model as presented in several public forums.

EPA RESPONSE: The EPA and NYSDEC do not believe that OCC has presented sufficient evidence to support their suggested language. The movement of the groundwater once it leaves the Ruco facility has not been investigated by OCC, and the information obtained to date on the movement of down gradient groundwater is incomplete. EPA and NYSDEC also believe the USGS model does not "definitively" demonstrate the concept put forth by OCC. The model is based on a number of assumptions and averages pumping rates from a specific year. The pumping rates at the Grumman and Navy facilities have been documented to significantly vary from year to year and seasonally. Because of the many imperfections in predictive modeling, the EPA and NYSDEC believe that models are not capable of "definitively" demonstrating the complex hydrogeology that exists in the area, but can be useful tools in attempting to study the hydrogeology. Until further information is obtained regarding the flow of groundwater beyond the Ruco facility, the EPA does not believe OCC's statement is substantiated.

5. COMMENT: In commenting on the Proposed Plan, OCC states that there is currently no data to support the statement that there are down gradient contaminants (in the groundwater).

EPA RESPONSE: Both the EPA and NYSDEC believe that there is more than sufficient evidence to document the presence of contaminants in groundwater down gradient of the Ruco facility. Investigative work conducted at the Grumman facility and work conducted by the USGS on the regional groundwater quality, reveal the widespread existence of contaminants in the groundwater down gradient of the Ruco facility. The contaminants detected down gradient were in many cases the same as contaminants found in the groundwater beneath the Ruco facility. Studies of regional groundwater movement clearly show a north to south direction of flow. The EPA and NYSDEC believe that contaminants introduced into the environment as a result of operations at the Ruco facility, particularly the groundwater, have clearly moved down gradient.

5. COMMENT: OCC comments that a statement be included in the ROD to indicate that there are many and substantial contributors to the groundwater contamination down gradient from the Ruco facility.

EPA RESPONSE: The EPA and NYSDEC acknowledge that there are contributors to the contamination present in the groundwater downgradient of the Ruco facility. This is indicated in the Scope and Role of Operable Unit section of the ROD.

Questions and Requests made to and of the agency's represented on August 27th 2009

Question: The plum is currently traveling south and running underneath the newly constructed Calpine Plant. The plant is using untreated ground water to cool itself and then release the steam generated from this process into the atmosphere. That steam creates visibility issues on South 107, creates an icy road surface in the winter and possible health hazard to the community. In 2007 we requested that an air sample analysis of this steam be made. We have as of yet received no response.

Response: Forward us a copy of those requests and we will follow up

Question: To what standard is the property being remediated to?

Response: Commercial Standard

Question: What affect does the plum have on private wells that are used for watering private vegetal gardens?

Response: There is no process currently in place that requires the water district to test private wells. The responsibility rests solely on the homeowner.

Question: What are the current Chromium levels in the plum?

Response: We will get back to you

Question: Can we get a copy of the most recent report regarding the former Hooker Chemical site?

Response: One will be emailed to the Association

We intend to schedule a follow up meeting with the general membership for either March or April. The Water District will be invited to participate

Below is the email we received from the EPA

From: "Taccone.Tom@epamail.epa.gov" Taccone.Tom@epamail.epa.gov
To: Info@hgcivic.org
Cc: aabarraz@gw.dec.state.ny.us
Sent: Tuesday, September 8, 2009 4:07:54 PM
Subject: Status of Issues Discussed on Aug 27th Regarding the Hooker Ruco Superfund Site

Deborah Strube, Henry Goessmann and members of the Hicksville Gardens Civic Association -

Below are the questions I wrote down while meeting with you. Please call or email me if the following is incorrect or incomplete.

Sincerely,

Tom Taccone
212 637-4281

1. There is a plume of water vapor from the Cal Pine cogenerating power plant. They asked if the plume has been sampled and if so, are the results available.

DEC is looking into and will get back to the Association.

2. EPA and the DEC will develop a fact sheet on the Site.

EPA and the DEC are developing factsheet which will describe the clean up the work related to Superfund and RCRA. The factsheet will be emailed to the Association upon completion.

3. The Association asked if EPA was going to place any restrictive controls on use of the property.

EPA will follow up on this in October.

4. The Association asked for a copy of the OU3 ROD.

Copy attached. (See attached file: OU3 signed ROD.pdf)

5. The Association asked if chromium was being removed from the groundwater.

Water that is down gradient from the Hooker/Bayer property is being sampled for chromium, but in a limited area around the former Grumman Plant 1. This is related to the removal a former discharge sump.

6. The Association asked about private wells south of Central Avenue. Is the groundwater contaminated and are there any private wells?

EPA to follow up on this question.

7. The Association wants to be on the DEC's mailing list for the proposed RCRA corrective action plan.

DEC will add the Association to its mailing list for the RCRA corrective action.