

## STANDARD CHLORINE/METACHEM: CHRONOLOGY OF EVENTS

<b>1976</b>	Exact Date?	Pipeline leaks dating to 1976, shown in federal records, contributed to contamination on Metachem's property. **NJ 2/15/02.
<b>1981</b>	September 16	5,000 gallons of monochlorobenzene (MCB) are released while workers are filling a railroad tank car. Tests indicate that the Columbia aquifer and Red Lion Creek are contaminated with Chlorobenzene compounds. Standard Chlorine (SC) voluntarily assumes responsibility for the cleanup.
<b>1982</b>	Exact Date?	SC installs groundwater treatment and recovery system. Monitoring of the system is performed by SC and has been documented in quarterly reports to DNREC since 1988.
<b>1986</b>	January 5	Storage tank #404 collapses, damaging two adjacent tanks. Approximately 400,000 gallons of paradichlorobenzene (DCB) and 169,000 gallons of trichlorobenzene (TCB) are released. Material spreads downstream to the Red Lion Creek. SC voluntarily assumes responsibility for the cleanup.
	March 27	SC enters into agreement with Occidental Chemical allowing SC to utilize land owned by Occidental for remediation efforts associated with the second release.
	May	National Pollutant Discharge Elimination System Permit approved by DNREC allowing treatment of groundwater and proper disposal of treated effluent.
<b>1987</b>	July 1	EPA and DNREC conduct Preliminary Assessment/Site Investigation Site is placed on the National Priorities List.
	November	EPA began a Remedial Investigation (RI) to define the nature and extent of the groundwater contamination at the facility. The RI included sampling and analysis of soil, sediment, surface water, and groundwater as well as performing human health and ecological risk assessments based on the results of the sampling and analysis conducted. ****DNREC/EPA Fact Sheet 9/28/02.
	Exact Date?	SC asks EPA to approve an incinerator for processing chlorobenzene wastes.
<b>1988</b>	January 12	SC enters into Administrative Consent Order with DNREC retaining Roy F. Weston to conduct Remedial Investigation/Feasibility Study over next five years.
	January 22	SC was sued in Civil Action No. 88-11 by SIRB as a Complaint and Consent Order for over \$5,000. They received this order because they had not complied with the Order with respect to the Red Lion Creek and the ecological risk assessment. They have also not revegetated the

	February 5	wetland areas and need to find a more effective system for groundwater remediation other than pump and treat. ***DNREC Enforcement Actions 1987 through 5/2002.  Secretary's Order No. 88-A-3 by Air for retention of consultant prior to construction of hydrodechlorination equipment and permitted construction. ***DNREC Enforcement Actions 1987 through 5/2002.
<b>1989</b>	October 24	Notice of Conciliation Order No. 89-WR-20 requiring feasibility report, engineering report and construction of control devices to achieve effluent limitations for 1, 2 and 1, 4 dichlorobenzene. (SC complied on 9/28/92). ***DNREC Enforcement Actions 1987 through 5/2002.
<b>1990</b>	March 5  March 27  August 10	Notice of Violation No. 90-HW-05 for hazardous waste determination, accumulation, labeling, container management, tank management, training, manifest, LDR, and recordkeeping violations. (SC complied on 3/27/90). ***DNREC Enforcement Actions 1987 through 5/2002.  SC complies with NOV No. 90-HW-05 filed on 2/27/90  C.A. #90C-AU-102-1-CU complaint filed by Water as a complaint and stipulation of final judgment for a total penalty of \$153,640.41. The complaint was regarding the environmental enhancement program with closed loop sampling, product drying and filtration, pDCB flaking system controls, alternative neutralization system, upgrade catch basin, vapor recovery, and vacuum distillation systems. ***DNREC Enforcement Actions 1987 through 5/2002.
<b>1992</b>	March 20  March 23  April 27  September	NOV No. 92-HW-02 for tank and railcar hazardous waste storage violations. The tanks were addressed through Civil Action No. 114011. Railcar violations were dropped as SC properly removed and disposed of hazardous wastes. (SC complied on 4/27/92). ***DNREC Enforcement Actions 1987 through 5/2002.  NOV No. 92-HW-03 issued as a result of an EPA NPDES inspector finding hazardous waste labeling and accumulation violations. (SC complied on 4/27/92). ***DNREC Enforcement Actions 1987 through 5/2002.  SC complies with NOV No. 92-HW-03 filed on 3/23/92  EPA released the RI report summarizing its findings. The contaminants of primary concern are the various forms of chlorobenzene (mono, para, di, tri, and tetra) which were found in the soil and sediment along the flow path of the spills northwest from the facility toward Red Lion Creek. Similar contaminants were found in the shallow depths of the Columbia Aquifer. The contamination formed a plume that extended north-northeast from the facility toward Red Lion Creek. No contamination was found in the deeper Potomac Aquifer which is a drinking water aquifer. The human health risk and ecological risk

	September 28	assessments determined that the potential human health risk was limited to onsite workers, and that the plants and animals in the path of the contamination were potentially at greatest risk from the contamination. ****DNREC/EPA Fact Sheet 9/28/02. Weston RI report concludes that groundwater is contaminated with chemicals that exceed Maximum Contaminant Levels established under the Safe Water Drinking Act <sup>ii</sup> . SC complies with Notice of Conciliation Order No. 89-WR-20 filed on 10/24/89
<b>1993</b>	May	EPA released the Feasibility Study examining several possible approaches that could be used to clean up the site, exploring the advantages, disadvantages and costs of each. ****DNREC/EPA Fact Sheet 9/28/02.
	March 3	An SOFJ for a total penalty of \$153,640.41 was entered by the court pursuant to complaint filed on 8/10/90
	September 23	NOV No. 93-HW-44 for storage of hazardous wastes in tanks and tank cars in violation of statutory and regulatory requirements. (SC complied on 11/2/93). ***DNREC Enforcement Actions 1987 through 5/2002.
	November 2	SC complies with NOV No. 93-HW-44 filed on 9/23/93
<b>1994</b>	August 4	NOV No. 94-HW-34 for use of ruptured tank T-13A causing a leak in violation of statutory and regulatory requirements. (SC complied on 9/7/94). ***DNREC Enforcement Actions 1987 through 5/2002.
	September 7	SC complies with NOV No. 94-HW-34 filed on 8/4/94
	October 5	NOV No. 94-HW-38 for failure to repair a rupture in tank T-13A in violation of statutory and regulatory violations. (SC complied on 12/31/94). ***DNREC Enforcement Actions 1987 through 5/2002.
	November 22	Secretary's Order No. 94-A-0048 from Hazardous Waste stating that per Order, SC was required to replace and close tank T-13A and submit PE assessment and statement regarding the tank. (SC complied on 12/31/94). ***DNREC Enforcement Actions 1987 through 5/2002.
	December 31	SC complies with NOV No. 94-HW-38 and Secretary's Order No. 94-A-0048 filed on 10/5/94 and 11/22/94 respectively.
	Exact Date?	EPA released a Proposed Plan for public comment laying out several possible alternatives for cleanup of the site. One of these was identified as EPA's preferred alternative involving containment and treatment of the groundwater. A fifth groundwater recovery well was added to the existing four-well system. ****DNREC/EPA Fact Sheet 9/28/02.
<b>1995</b>	February 2	Complaint and Consent Order No. 14011 and Legal Office No. 94-A-68 from Air and Hazardous Waste requiring SC to remove and dispose of

		wastes in tanks 315A, 326, and 327 (tetrachlorobenzenes). (SC complied on 2/21/98). ***DNREC Enforcement Actions 1987 through 5/2002.
	March	EPA issued a Record of Decision (ROD) selecting the cleanup plan (remedy) for the site. The ROD selected a remedy for groundwater consisting of a subsurface barrier wall to be installed near Red Lion Creek to capture and contain the contaminated groundwater and a pump-and-treat system to remove the contamination from the captured groundwater. ****DNREC/EPA Fact Sheet 9/28/02.
	October 31	SC receives Permit “APE-94/0903-Construction” from DNREC for the construction of a Venturi Scrubber to control emissions from its pDCB flaking process <sup>iii</sup> .
	Exact Date?	Court order issued to dispose of contents of “Tank T-11” **NJ 10/18/00

<b>1996</b>	April 10	EPA Region III conducts inspection of facility in order to address complaints of foul odors by local residents (Coalition). Inspection revealed violations though they were not directly related to the Coalition’s complaints. *EPA Memo, Hotline Complaint on Metachem, 8/28/00
	July 9	NOV No. 96-HW-06 for labeling, documentation, storage and accumulation violations of statutory and regulatory requirements. (SC complied on 8/14/96). ***DNREC Enforcement Actions 1987 through 5/2002.
	July 22	Stemming from concerns that SC’s recycling process is generating dioxins and furans, DNREC requires SC to run waste chemicals through a distiller twice to remove contaminants. DNREC issues permit for chemical recycling process.
	August 14	SC complies with NOV No. 96-HW-06 filed on 7/9/96
	November	In response to the Coalition’s complaint, EPA Engineering and Science Staff (ESS) reviewed MC’s recycling process. Of primary concern was a toxic chemical called dioxin which is a byproduct of the process. ESS evaluated whether the process: 1) was properly permitted by DNREC, 2) was operating in compliance with applicable environmental regulations, and 3) posed a health threat to the surrounding community. ESS determined the hydrogenation process was properly permitted by DNREC and that MC’s normal plant operations do not pose an <i>acute</i> health risk to the surrounding local community under normal operating conditions. * EPA Memo, Hotline Complaint on Metachem, 8/28/00
	December 16	SC receives Permit “APC-94/0903-Operation” from DNREC for the operation of a Venturi Scrubber to control emissions from its pDCB flaking process <sup>iv</sup> . Condition 11 of Permit is that a stack test must be performed within 180 days of the permit being issued.
	December 16	SC receives air pollution permit for pDCB packaging production line.

	Exact Date?	EPA ordered Standard Chlorine to design and implement a pump-and-treat system. The current system was installed in 1986 as an interim measure, until the final system specified in the ROD was designed and installed. (The design has not been completed). ****DNREC/EPA Fact Sheet 9/28/02.
<b>1997</b>	April 11	Administrative Penalty Assessment No. 97-A-0012 in the amount of \$100,000. The action concluded and settled through SOFJ Civil Action No. 00-C-10-140-HLA. ***DNREC Enforcement Actions 1987 through 5/2002.
	June	DNREC representative met with the Spokesperson of the Coalition to Stop Metachem's Polluting (Coalition) and stated that Metachem offered to have an independent company install an air monitor at her residence. The Spokesperson declined, claiming the company could falsify the results to favor Metachem. At the permission of the Governor's office, the State of Delaware discontinued correspondence with the Coalition. *EPA Memo, Hotline Complaint on Metachem, 8/28/00
	August 5	NOV No. 97-HW-14 for accumulation and storage of large pieces of contaminated debris in a roll-off container in violation of statutory and regulatory requirements. (SC complied on 9/27/97). ***DNREC Enforcement Actions 1987 through 5/2002.
	September 27	SC complies with NOV No. 97-HW-14 filed on 8/5/97
<b>1998</b>	January	DNREC has performed 26 inspections at the facility since 1983, an average of two inspections per year. * EPA Memo, Hotline Complaint on Metachem, 8/28/00
	January 29	Notice of Noncompliance TSCA-III-98-0120. Polychlorinated biphenyl (PCB) inspection was performed by representatives of EPA Region III at the facility to ensure compliance with PCB regulations. Based upon the inspection, Standard Chlorine is not in compliance with PCB regs. Specifically, SC violated the requirements of the Storage for Disposal regs.
	February 21	SC complies with Complaint and Consent Order No. 14011 and Legal Office No. 94-A-68 from Air and Hazardous Waste filed on 2/2/95.
	May	United States Department of Justice, on behalf of EPA, files complaint against SC alleging violations of the Clean Air Act. Allegations stemmed from nearby residents (Coalition) of the facility complaining of foul odors being emitted by the plant. EPA Region III inspection conducted in April 1996 revealed violations at the facility though these violations were unrelated to the grievances received from local residents. * EPA Memo, Hotline Complaint on Metachem, 8/28/00
	July 16	NOV No. 98-HW-13 for accumulated and stored hazardous wastes

		without covering or labeling the drums, in violation of statutory and regulatory requirements. (SC complied on 8/13/98). ***DNREC Enforcement Actions 1987 through 5/2002.
	August 13	SC complies with NOV No. 98-HW-13 filed on 7/16/98
	December 2	Metachem conducts leveraged buyout of SC backed by Connecticut-based Charter Oak Capital Partners.
	December 8	Robert Touhey, VP of SC, requests that DNREC transfer all Air Pollution Control Permits held by SC to Metachem <sup>v</sup> .
	December 18	SC changes its name to Godel, Inc <sup>vi</sup> .

<b>1999</b>	January	From 1997 to 1999, EPA's Criminal Investigation Division investigated three allegations of criminal activity at Metachem. Each time CID found no evidence of criminal activity at the facility. * EPA Memo, Hotline Complaint on Metachem, 8/28/00
	January 13	EPA conducts reinspection of facility in order to address violations alleged in May 1998 complaint. The reinspection did not identify any violations of the Hazardous Organic NESHAP (HON). However, a January 14, 1999 Section 114 request for information letter and response of CFC issues indicate that CFC violations had continued under SC's ownership as to several CFC-related repairs subsequent to EPA April 1996. Although EPA has not identified any Clean Air Act violations since MC's ownership began in 12/98, EPA has not found any evidence showing that work practices at the facility have changed or will change. *EPA, Subject: Standard Chlorine Reinspection, Area 1 Enforcement Branch 1/15/99
	February 10	Air Pollution Control Permits held by SC are transferred by DNREC to Metachem <sup>vii</sup> .
	April 22	The Coalition sent a letter to the EPA Office of Inspector General (OIG) contending that EPA had not taken adequate enforcement action against Metachem. In response, EPA performed multiple interviews and reviewed EPA and DNREC files on previous inspection reports, air permits, correspondence, stack test results and data obtained from EPA and DNREC's databases. * EPA Memo, Hotline Complaint on Metachem, 8/28/00
	June 28	Consent Decree finalized between US Department of Justice and Standard Chlorine settling claims made in May 1998 complaint.
	July 16	EPA fines Metachem, as part of the Consent Decree, \$349,500 for a string of Clean Air violations, committed entirely by SC, dating to the mid-1990's.
	September 30	SHWMB representatives conducted the second half of a hazardous waste compliance assessment at Metachem.

	October 26	NOV No. 99-HW-28 was issued for the following statutory and regulatory violations: labeling of roll-offs, failure to maintain records, and failure to obtain training for Hazmat team members as discovered during a 9/99 compliance assessment. (SC complied on 11/17/99). ***DNREC Enforcement Actions 1987 through 5/2002.
	November 17	Metachem complies with NOV No. 99-HW-28 filed on 10/26/99
	November 22	The SHWMB issued a letter to Metachem stating that all deficiencies listed in the October 15, 1999 NOV have been corrected to the satisfaction of the SHWMB.
	December 17	*** DNREC officials said the written report for substituting the threshold limit values of dichlorobenzene for metadichlorobenzene would be available this week. To date, the department has heard nothing.
	December	Consultant conducts preliminary tests on stacks. Metachem informs DNREC of excess emissions from recycling process but DNREC deems results to be flawed. Company shuts down recycler and redesigns it without state permits.

<b>2000</b>	January	The state received a report from Metachem in January 2000 indicating a benzene output of 60 lbs/hour which is 129 times the permit limit, but a consultant said the results were flawed and DNREC awaits a full accurate report. In a report to EPA, Metachem's recycling process also emitted toxic 1, 2-dichlorobenzene at a rate of 50,000 lbs/year when 1,088 are permitted. The recycling process produced monochlorobenzene emissions at 7,000 lbs/year when the permit allowed 210 lbs/year.
	February	Cease and Desist Order No. 2000-A-0011 for the metadichlorobenzene purification process during the time period required by the order. ***DNREC Enforcement Actions 1987 through 5/2002. DNREC signed a Cease and Desist Order on Metachem to cease operating a metadichlorobenzene purification process that is not properly permitted. The company registered the unit, however they erred in their calculation of toxic emissions by using an incorrect compound for the threshold limit value. The air quality management section issued a letter to the company informing them of this error and requesting that the unit be shut down until it was properly permitted. This action is necessary because the company continues to operate the equipment.
	March 6	The company submitted a permit application to include a metadichlorobenzene control device. Discussions were initiated to resolve the violation and subsequently return the unit to operation.
	March 7	Metachem performs stack test on pDCB flaker process as a condition of Operation Permit "APC-94/0903" issued in December 1996 <sup>viii</sup> . The results of the test indicate average reduction in pDCB VOC's by the Venturi Scrubber to be 8% failing to meet required 81% reduction and pDCB operation is halted.

	<p>March 14</p> <p>March</p> <p>April</p> <p>April 14</p> <p>September</p>	<p>Metachem manager files report with EPA noting benzene emissions exceed levels allowed by recycling permit.</p> <p>The company sent a draft Order that would essentially withdraw the Cease and Desist Order and allow the company to go back into operation. The order was found to be inadequate. The Department drafted a Conciliatory Order that would recognize the violation, propose a penalty, require control devices, and allow the process to be reactivated.</p> <p>DAG Kevin Maloney and the Secretary met with Frank Romanelli, CEO and Dave Swayze, Metachem's legal counsel to resolve the compliance issues related to permitting the crystallizer process unit. The Department issued a C&amp;D Order and a press release effective for 39 days and expired on March 29<sup>th</sup>. The company voluntarily has kept the unit shutdown since that time. They initially believed that the unit qualified for registration and did not require a permit. The Department disagreed with that interpretation and informed them in November 1999 not to proceed with construction or operation. They began operation of the unit on January 3<sup>rd</sup>. The Department had been negotiating settlement of the case since it issued the C&amp;D Order. A draft Administrative Order on Consent and Penalty Assessment would require them to install emission control equipment on the process (carbon canisters), allow them to resume operation under specific conditions and impose a penalty of \$221,000. The company has asked that we reconsider the amount of the fine. They provided information on the number of days the unit actually operated and explained why they decided to proceed with construction and operation of the unit.</p> <p>Administrative Penalty Assessment No. 2000-A-0022 for \$200,000 for failing to secure a permit to manufacture a chemical other than paradichlorobenzene. Per Order SC is required to expend \$50,000 for a Riparian Corridor Restoration Project in the vicinity of the facility. SC is also required to spend \$50,000 for the development of a database for emissions and permits as part of the Departments website. The company paid a direct administrative penalty in the amount of \$50,000. Per Order, \$50,000 was waived on the condition that SC is not found to have been in violation of Air Reg. #2 or in high priority violation during the period of one year from the date of the execution of the Order. SC paid the waived portion of the penalty as a result of the violations in the Complaint and SOFJ for Civil Action No 00-C-10-140-HLA. ***DNREC Enforcement Actions 1987 through 5/2002.</p> <p>DNREC determined that Metachem Products' pDCB flaking process has been operating in violation of its permit and regulatory requirements. The company was required to conduct stack testing to determine actual emissions levels in 1997. After repeated reminders, they finally conducted the stack testing in March. Stack test results indicate emission levels to be 10 times greater than estimated in their permit application. In addition, the Venturi Scrubber control device that was intended to achieve the 81% reduction in emission levels under the VOC/RACT</p>
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		<p>requirements was found to reduce emissions by only 8%. We consulted with the Division of Public Health to determine whether the higher emissions levels represented an acute health treat. They determined that it did not. DNREC met with company officials and their legal counsel on Tuesday. Staff previously advised them to submit an application for an appropriate control device. They have submitted an application for a carbon absorption system that should reduce emissions by over 95%. We are currently processing the application. DNREC informed the company that they intended to seek a substantial penalty and that would include the value of the “economic benefit” they enjoyed for their 3 years of non-compliance. The application indicates that the annual cost of operating the carbon absorption system is \$75,000. Over the 3 years of non-compliance the total economic benefit would be \$225,000. DNREC will offer to resolve the matter administratively if they are willing to agree to the penalty. If not DNREC is prepared to take civil action against them in Superior Court.</p>
September 21		<p>DNREC issues Permit “APC-94/0903-Construction/Operation Temporary” for the installation and operation of a carbon absorption unit. Metachem begins operation of carbon absorption unit.</p>
October 6		<p>The Department presented the company with a revised outline of the proposed enforcement action against them for recent violations. The company was concerned that their investors may not be willing to provide the funding necessary for them to meet the terms of the proposal. Members of the company’s Board met earlier in the week to consider the proposal. DNREC asked the company’s CEO to provide it with a response by the end of the week. CEO Frank Romanelli informed the Department that if the Board chose not to provide the necessary financial support the company faced the real prospect of shutting down its operations.</p>
October 16		<p>DNREC and Metachem failed to resolve their differences through negotiations. DNREC files complaint in Superior Court against Metachem seeking penalties up to \$23.7 million. **NJ 10/18/00. Civil Action No. 00-C-10-140-HLA for a primary penalty of \$400,000; payment of waived penalty from Order No. 2002-A-0022 for \$50,000, and a secondary penalty of \$1,000,000. The SOFJ entered by the court on 2/1/01, settled all outstanding violations at the facility. Metachem was allowed to offset against the Secondary Penalty all direct and indirect costs associated with environmental programs, enhancements, and remediation activities at the facility. In the complaint, DNREC charged that Metachem failed to control paradichlorobenzene emissions from a major processing and packaging operation. Metachem was supposed to have tested the system by 6/15/97 but did not until 3/6/00. As of the facility’s closure, Metachem had paid a total of \$160,000 of the \$400,000 primary penalty. Metachem paid \$50,000 penalty that was waved in Order No. 2000-A-0022. Metachem also paid \$25,000 to reimburse DNREC’s investigatory and legal costs related to the action. ***DNREC Enforcement Actions 1987 through 5/2002.</p>

October 16		<p>An Imminent Hazard Order No. 2000-A-0053 by Hazardous Waste to immediately address the potential danger posed by a deteriorated tank containing a solidified tetrachlorobenzene and trichlorobenzene mixture, identified as K085. The hazardous waste storage violations were in Tank T-11 and ancillary equipment. MC provided inspection results to prove tank was structurally sound on 10/19/00. (MC complied on 5/4/01). ***DNREC Enforcement Actions 1987 through 5/2002. We had a very extensive discussion with Metachem regarding the filing of a lawsuit against the company for air pollution violations on October 16, 2000. DNREC's intent is to use the lawsuit to drive the company into conducting a comprehensive compliance audit of the facility and to correct all violations within a specified timeframe. Failure to meet those timeframes would result in the imposition of stipulated penalties. DNREC is also using this enforcement action to leverage the company into conducting a facility-wide chemical process, safety and prevention program audit which we otherwise would not be able to require under our existing authorities. DNREC staff had communicated to the company that the Department's expectation is that an agreement will be reached and the issues resolved through a consent agreement that will be judicially entered in Superior Court within 30 days. The company committed to give a prompt response.</p>
October 17		<p>The SHWMB issued a NOV to Metachem for exceeding the 90-day generator accumulation time period for a roll-off container of K085. The SHWMB also issued a letter to Metachem requesting information on the management and disposal of a silica/limestone solid generated in the facility's acid neutralization tank.</p>
October 20		<p>DNREC filed a complaint with the Superior Court on past violations at Metachem after it became clear we would not be able to resolve issues through negotiations. The complaint, although it focuses on permit violations for one of the facility's air emission units, will allow DNREC the opportunity to address, in a comprehensive way, all of the environmental compliance issues at the facility. In a separate action, DNREC issued an imminent hazard order to require the company to empty and remove a tank containing hazardous waste. The tank is in degraded condition. DNREC is continuing to investigate a number of other allegations that were contained in an anonymous letter received by DNREC.</p>
October 25		<p>NOV No. 00-HW-17 issued to remove a waste pile of K105 a hazardous waste discovered on-site through an inspection performed on 10/18/00. The Notice requires the facility to properly manage and dispose of the waste and implement a waste pile closure plan. A plan for waste pile removal and closure must be submitted to the SHWMB within 15 days and all work completed within 90 days of plan approval. Metachem submitted an action plan on 11/9/00 and completed the work on 3/27/01. The compliance letter was issued as of 5/10/01. ***DNREC Enforcement Actions 1987 through 5/2002.</p>
Exact Date?		<p>More than 40 tons of toxic paradichlorobenzene vapors escaped the plant</p>

		yearly according to estimates of late 2000. Metachem confirms holding more than 12 millions pounds of waste tetrachlorobenzene that the company had hoped to put through a controversial recycling process. **NJ 12/22/00.
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<b>2001</b>	January 2	The SHWMB sent a letter to Metachem regarding hazardous waste manifest discrepancies observed upon review.
	February 1	Metachem and DNREC settle lawsuit for \$1.5 million <sup>ix</sup> . Godel Inc. files counterclaim in DNREC pollution lawsuit, claiming that it fully informed Metachem of potential environmental liabilities thereby absolving Godel of all legal and financial responsibility.
	February 14	DNREC gave Metachem 30 days to produce detailed information on any and all changes made to the production processes since 1996, and both actual or potential changes in emissions.
	March 1	SHWMB representatives conducted a site visit at Metachem to evaluate activities conducted in response to a Department issued Imminent Hazard Order.
	March 4	Metachem ordered to operate a chemical waste recycling system to eliminate a 15 year old stockpile of tetrachlorobenzene inherited from SC. Without the use of the recycling system, Metachem would have to dispose of millions of pounds of tetrachlorobenzene at rates of 50-65 cents/lb. **NJ 3/4/01.
	March 31	NOV from Water to provide evidence that Metachem completed and implemented solutions to DMR violations as well as change to Standard Operating Instructions. (Metachem complied on 4/17/01). ***DNREC Enforcement Actions 1987 through 5/2002.
	April 2	Metachem received approval for a 60-day extension to waste disposal timeframes included in Imminent Hazard Order 2000-A-0053.
	April 6	Metachem was fined \$26,500 after failing to meet one of the first reporting deadlines agreed to in the settlement. Metachem reported that SC changed the chemical recycling process without state review soon after receiving a permit in 1996 which increased emissions of benzene, dichlorobenzene, and monochlorobenzene. Metachem released dichlorobenzene at a rate 47 times higher than permitted. **NJ 4/6/01.
	April 17	Metachem complies with NOV from Water filed on 3/31/01
	May 4	Metachem complies with An Imminent Hazard Order No. 2000-A-0053 issued on 10/16/00
	May 10	A compliance letter was issued regarding NOV No. 00-HW-17 filed on 10/25/00
	May	DNREC said last week it decided to order Metachem to get a new permit.

		<p>A permit for the recycling process would require a public hearing if one is requested by an interested party. The new permit will be separate from an ongoing application for new plant-wide permits required under an EPA rule change granting one elaborate permit for the entire plant.</p>
August 27		<p>NOV from air issued for the release of approximately 4,482 pounds of benzene to the atmosphere resulting from operator error and equipment failure. (Violation corrected 8/16/01). ***DNREC Enforcement Actions 1987 through 5/2002.</p>
October		<p>Metachem is incurring losses of approximately \$1 million <i>per month</i>. In an effort to abate the losses and increase revenue, Metachem engages in negotiations to acquire the assets of a competitor. Despite a letter of intent signed by both parties, negotiations fail in April 2002<sup>x</sup>.</p>
October 10		<p>DNREC orders Metachem to test for dioxins and furans.</p>
October 14		<p>Federal officials have ordered Metachem to develop a new plan for cleaning up a decades-old chemicals spill site that may threaten a prime drinking-water supply for northern Delaware. The EPA has rejected a plan under study since 1992 to use bacteria to break down chemicals in stockpiled soil at the site along Red Lion Creek. EPA told Metachem that tests had shown that using bacteria wouldn't work and that the contaminated soil needed to be disposed of using a heat-treating process. The EPA is concerned that pumping wells at the site have not prevented groundwater tainted with chlorobenzene compounds from leaking toward the Potomac Aquifer which supplies 20% of New Castle County's water in summer. Romanelli disputed the EPA's finding that the bacteria would not work and said the company expects to meet with the agency to discuss the bacteria findings and options for soil incineration. The EPA estimated the changes could increase the cost of cleaning up the Superfund site from \$7 to \$17 million. A final plan for the Superfund cleanup has never been finished and approved by the EPA. The EPA has ordered Metachem to promptly complete an underground wall to contain contaminated groundwater that for years slipped past pollution-control wells. The leaks threaten the Potomac Aquifer. The EPA has also ordered Metachem to heat-treat all the stockpiled soil tainted by chlorobenzenes. Processing the soil in closed ovens would more than double overall costs. The EPA has said that Metachem might also need to dig up and remove contaminants. The EPA will study whether it makes sense to scrape up contaminated sediments in wetlands near Red Lion Creek because the excavation harm could outweigh the benefits from removing the contaminants. Romanelli suggested that the company could heat-treat the soil at the plant holding down costs, but EPA said Metachem would need new equipment, pollution permits, and public reviewed to do that. The EPA ruled out biological treatment in August citing high contamination levels and the company's inability to prove the process would work even under ideal laboratory conditions. Results have been unacceptable from the well network built to control groundwater contamination. That system never fully prevented toxic chemicals from escaping into shallow groundwater, and federal officials decided last spring to investigate whether the chemicals could reach the Potomac</p>

		Aquifer. A leading proposal to stop the leakage would require digging a more than 700 foot long trench between the factory and Red Lion Creek that would be as much as 40 feet deep and filled with iron fillings or another material to block the movement of the contaminants into the creek or deep aquifers. **NJ 10/14/01
	October 25	Secretary's Order 2001-A-0042 was issued to Metachem to amend the company's permit to install, remove and modify distillation columns at their facility. These modifications will allow more efficient operation and reduce emissions by about 2 ¼ tons from their current permitted levels.
	November 13	Enforcement Action by air brought to the Enforcement Panel who recommended a penalty of approximately \$45,000 for the resolution of enforcement resulting from multiple spills at the facility including the 8/16/01 spill. At the time of the facility closure an Order had not yet been issued for these violations. ***DNREC Enforcement Actions 1987 through 5/2002.
	December 7	The Department informed Metachem of its dissatisfaction with the Environmental Compliance Audit prepared by ENSR and the Computerized Maintenance tracking System prepared by Metachem. Both were required by the SOFJ. Staff has conferred with EPA Region III which concurs with DNREC's findings. A meeting was held with Metachem on December 4, 2001 to discuss both items. The Department has requested changes to the audit that will result in a delay in completing an Audit Implementation Plan and submittal of a new Title V permit application. Metachem also committed to having the protocols submitted for testing products for dioxin and furan.
	December 31	Operating losses for the tax year exceed \$16.6 million <sup>xi</sup> .

<b>2002</b>	January 15	Representatives from the AG's office, Division of Air & Waste Management and the Secretary met with Metachem to discuss dioxin testing requested by the Department. Most testing requested was outside the scope of the Stipulation of Final Judgment. Metachem was willing to do the testing but wanted to find a way to avoid another large expense in 2002.
	February 15	The EPA on Thursday took over the cleanup of the Superfund spill site north of Delaware City, rejecting Metachem's requests for more time to study less expensive solutions. The EPA rejected further reviews of the biological cleanup saying it saw unsatisfactory results during pilot tests. Federal officials instead ordered use of a far more costly heat treatment system to bake off the chemicals for eventual destruction. Tainted soils would have to be removed for treatment and disposal unless the state and EPA issue pollution-control permits for on-site equipment. Design work could take about two years with actual soil removal and treatment likely to take another year. EPA will use the Hazardous Substance Superfund to clean up Metachem's property. **NJ 2/15/02.
	February 22	Due to a lack of responsiveness to the EPA by Metachem, the EPA has

		decided to take over the implementation of the soil pile remedy.
March 1		ENSR submitted the revised Environmental Compliance Audit or Metachem directly to the Department in accordance with the Stipulation of Final Judgment.
March 31		Metachem claims \$31.1 million in assets and \$54.6 million in liabilities.
April 12		The SHWMB sent a letter to Metachem to provide written confirmation of its previous verbal agreement to consider Tank T-13AR RCRA empty at a level of 10% or less total capacity. This interpretation was made after Metachem submitted documentation regarding construction of the tank and justification as to why Tank T-13AR cannot be completely emptied.
April 15		The Department received the Environmental Compliance Corrective Action Plan for Metachem in accordance with the Stipulation of Final Judgment.
April 30		Metachem to shut down plant and company says a customer's bankruptcy is to blame. **NJ 4/30/02.
May 1		Metachem begins discussions with a major customer. The goal of the negotiations was to encourage the customer to lend or invest in Metachem. Talks fail on the evening of May 1 <sup>xii</sup> .
May 3		State and federal regulators agree to allow the company to shut down a network of wells designed to prevent chemical contamination from spreading in groundwater near the plant. A temporary well network for containing groundwater contaminated by the plant failed repeatedly and operated in violation of a consent agreement for more than a decade. DNREC and the EPA agree to allow a shutdown of Metachem's troubled contaminated groundwater control system that will be replaced in the coming years as part of the Superfund cleanup. Metachem locks gates and completes phase I of shutdown process. **NJ 5/4/02, 5/5/02.
May 10		Metachem files to liquidate under Chapter 11. Authorization secured by the Department from the Speaker and the President Pro Tempore of the Senate to spend up to \$2 million from the Hazardous Substance Cleanup Fund.
May 14		Metachem abandons facility to DNREC & EPA.
May 17		DNREC & EPA authorize \$3.9 million to stabilize Metachem. All company operations cease.
August 21		DNREC revokes Metachem's Coastal Zone Permit.
September 7		EPA and DNREC are testing wells at the Metachem site containing chemical waste pools. The EPA said testing and related activities would delay efforts to restart a troubled well network installed in the mid-

		1980's to slow the spread of chemical spills through surrounding aquifers. The EPA needs to get the undiluted chemicals out before they can restart the groundwater recovery system. Congress created the Superfund to clean up orphaned pollution sites or those where responsible parties lacked adequate resources to complete the work. The EPA expects to complete the design of a new interim groundwater treatment system by next summer with operations to begin in 2004. Design work on a system to heat-treat and remove chlorobenzenes from soils and sediments at the plant are due by mid-2004 with work ending in 2006. One proposal for the groundwater control project included construction of a 2000-foot waterproof barrier in a trench 10-40 feet deep around three sides of the factory. **NJ 9/7/02.
	September 28	EPA is currently upgrading and repairing the groundwater recovery system to be placed back into service to continue to treat the groundwater. The system is being modified to allow it to operate without the #3 boiler and the air stripper. The system will use a liquid carbon filter to remove contamination from the water. This is an industrial-size version of the technology used in the carbon water filters many American have in their refrigerators or on their kitchen faucets to filter their drinking water. ****DNREC/EPA Fact Sheet 9/28/02.
	October	State and federal officials order checks of 49 groundwater-monitoring wells in the area after finding two to three feet of undiluted chemicals in two wells at Metachem. **NJ 10/7/02.
	October 7	The EPA is attempting to remove the Dense Non-Aqueous Phase Liquid (DNAPL) from two of the five recovery wells by using a specialized pump. This process is expected to take 2-3 weeks. It was determined that an attempt should be made to remove the DNAPL prior to restarting the system. Once this is complete, the recovery system will be placed back into service. ****DNREC/EPA Fact Sheet 9/28/02.
	December	Final liquidation of assets including \$685,000 in cash and some outstanding accounts receivable is commenced. **NJ 12/11/02.

<sup>i</sup> Administrative Order EPA Docket # III-96-73-DC, section III A

<sup>ii</sup> Administrative Order EPA Docket # III-96-73-DC, section III D

<sup>iii</sup> Complaint, DNREC v. Metachem, 10/16/2000

<sup>iv</sup> Complaint, DNREC v. Metachem, 10/16/2000

<sup>v</sup> Complaint, DNREC v. Metachem, 10/16/2000

<sup>vi</sup> Complaint, DNREC v. Metachem, 10/16/2000

<sup>vii</sup> Complaint, DNREC v. Metachem, 10/16/2000

<sup>viii</sup> Complaint, DNREC v. Metachem, 10/16/2000

<sup>ix</sup> "Stipulation of Final Judgment Between Nicholas DiPasquale & Metachem LLC." 2/1/01

<sup>x</sup> Fax to DiPasquale from EPA, dated 5/7/02, "Notes from 5/2/02 meeting"

<sup>xi</sup> Fax to DiPasquale from EPA, dated 5/7/02, "Notes from 5/2/02 meeting"

<sup>xii</sup> Fax to DiPasquale from EPA, dated 5/7/02, "Notes from 5/2/02 meeting"