AMENDMENT TO THE DIRECTOR'S FINAL FINDINGS AND ORDERS OF JULY 6, 1992

I. JURISDICTION

These Director's Final Findings and Orders ("Orders") are issued pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("OEPA") under Sections 3734.13, 3734.20, 3745.01, and 6111.03 of the Ohio Revised Code ("ORC").

II. PARTIES

These Orders shall apply to and be binding upon the Respondent, its assigns, and successors in interest and binds employees of Respondent from doing any act which is prohibited under these Orders.

III. FINDINGS OF FACT AND CONCLUSIONS OF LAW

On July 6, 1992, the Director issued Final Findings and Orders to the above named Respondent. All findings of fact and conclusions of law made in the July 6, 1992 Final Findings and Orders ("1992 Orders") are hereby incorporated by reference.

IV. ORDERS

Except as described below, all terms and conditions contained in the 1992 Orders remain valid and in effect.

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Davis  Date 9/10/96
IX. REIMBURSEMENT OF COSTS

Ohio EPA has incurred and continues to incur oversight and response costs in connection with the facility. Upon the effective date of this Amendment, Respondent shall begin remitting quarterly payments of $2,269.82 per quarter toward the balance of all oversight and response costs in connection with the facility incurred by Ohio EPA prior to July 6, 1992 ($27,237.86). The first quarterly payment will be due on October 1, 1996. Respondent may, at any time prior to the termination of these Orders, remit payment of part or all of the oversight and response costs in connection with the facility incurred by OEPA during the pendency of the Orders. Prior to the termination of these Orders, Ohio EPA shall submit to Respondent an itemized statement of all remaining costs, incurred by OEPA pursuant to these Orders. Following receipt of the itemized statement, Respondent shall pay, within thirty (30) calendar days, the full amount claimed.

Payment to Ohio EPA shall be made to the Ohio Hazardous Waste Clean-up Special Account created by ORC Section 3734.28 by check payable to “Treasurer, State of Ohio” and shall be forwarded to the Fiscal Officer, Ohio EPA, P.O. Box 1049 1800 WaterMark Drive, Columbus, Ohio 43216-1049, ATTN: Edith Long.

A copy of the transmittal letter and check shall be sent to the Fiscal Officer, DEAR, Ohio EPA, P.O. Box 1049 1800 WaterMark Drive, Columbus, Ohio 43216-1049, ATTN Patricia Campbell and the site coordinator.

V. SIGNATORIES

Each undersigned signatory to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such signatory to this document.

IT IS SO ORDERED:

[Signature]
Donald R. Sutregardus, Director
Ohio Environmental Protection Agency

SEP 10 96
Date

VI. WAIVER AND AGREEMENT

In order to resolve disputed claims, without admission of fact, violation or liability and in lieu of further enforcement action by the Ohio EPA for only the obligations addressed in these Findings, I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

[Signature]
[Date 9-15-9]
and Orders, the Respondent agrees that these Findings and Orders are lawful and reasonable and that the Respondent agrees to comply with these Orders.

The Respondent hereby waives the right to appeal the issuance, terms, and service of these Orders, and the Respondent hereby waives any and all rights it might have to seek judicial review of said Findings and Orders either in law or equity.

Notwithstanding the preceding, the Director and the Respondent agree that in the event that these Findings and Orders are appealed by a third party, the Respondent retains the right to intervene and participate in the third party’s appeal. In such event, the Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless said Orders are stayed, vacated, or modified.

IT IS SO AGREED.

Gem City Chemicals, Inc.

David A. Stewart

Donald R. Soregardus, Director
Ohio Environmental Protection Agency

\[8/25/96\]
Date

\[SEP 10 1996\]
Date

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: [Signature] Date 9-10-96

[Signature]
SEP 10 96

ENTERED DIRECTOR’S JOURNAL.
BETORE THE

OHIO ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF:

GEM CITY CHEMICALS, INC.
1287 AIR CITY AVENUE
P. O. BOX 251
DAYTON, OHIO 45404

RESPONDENT

DIRECTOR'S FINAL FINDINGS
AND ORDERS

RESUMED

It is hereby agreed by and among the parties hereto as follows:

I. JURISDICTION

These Director's Final Findings and Orders ("Orders") are issued pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("OEPA") under Sections 3734.19, 3734.20, 3745.01, and 6111.03 of the Ohio Revised Code ("ORC").

II. PARTIES

These Orders shall apply to and be binding upon Respondent, its assigns, and successors in interest and binds employees of Respondent from doing any act which is prohibited under these Orders.

III. FINDINGS OF FACT DETERMINATIONS, AND CONCLUSIONS OF LAW

A. The Director of OEPA has determined the following findings of fact and conclusions of law:

1. For purposes of these Orders "Respondent" shall mean Gem City Chemicals, Inc. ("GCI"), 1287 Air City Avenue, Dayton, Ohio. In 1967, Respondent purchased Air City Fuels located at 1287 Air City Avenue, Dayton, Ohio. Air City Fuels engaged in storing and distributing fuel oil and coal. Respondent and Air City Fuels jointly leased the Site from CSX Transportation ("CSX") from 1967 until 1971. Respondent became sole owner of the business in 1971. From 1971 to September 1989, Respondent leased the property from CSX upon which its chemical product receiving, repackaging, and distribution operations were conducted. On September 26, 1989,
Respondent purchased the property from CSX with knowledge of the existence of contamination at the Site.

2. The Site is located approximately one mile south of the city of Beyond's South Miami well field and directly overlies the Miami Valley aquifer—a sole-source aquifer.

3. Respondent began receiving, storing, transferring, blending and distributing chemical products and solvents including some of the contaminants found in the soil and groundwater and listed below, at the Site in or about 1987.

4. Respondent removed ten (10) underground storage tanks ("USTs") during April and May 1986. At least two or three of these tanks were used for storage of fuel oil and the others for storage of solvents. The condition of these tanks during operation and removal, specific products stored, and removal procedures are unknown by USEPA.

5. At the facility, Respondent transferred solvents from tanker trucks to 55-gallon drums at a pouring shed without adequate containment structures for spills or leaks. Respondent also formerly used a railroad spur for delivery of chemicals; it is unknown whether spills occurred during these transfers. Incidental spillage may have occurred at the Site in connection with normal chemical handling.

6. During 1990-1991, Respondent constructed a concrete pad as a containment structure in the location of the pouring shed. However, the area used by the tanker trucks during transfer is still without adequate containment for spills or leaks from the trucks and the trucks' ancillary equipment (i.e., valves, hose connections, etc.).

7. In 1987 twelve (12) shallow soil samples from the Site were collected by Qsource Engineering (Qsource) with a backhoe. Some samples were found to contain methylene chloride up to 18 parts per million (ppm), tetrachloroethene up to 954 ppm, trichloroethene up to 141 ppm, 1,1,1-trichloroethene up to 14 ppm, isopropyl alcohol up to 965 ppm, acetone up to 628 ppm, toluene up to 111 ppm, xylene up to 115 ppm, and methyl ethyl ketone up to 43 ppm. The area showing contamination included the pouring shed, storage shed, former above ground tank storage area and general location of the USTs.

8. In 1987, Respondent contracted with Ohio Drilling Co. to install four (4) ground water monitoring wells. Trichloroethene, used as a tracer, was found in all four wells.
9. In May 1988, Respondent contracted with GeoSource Engineering (GeoSource) to sample the four (4) monitoring wells described in Finding 8 (above). GeoSource also conducted a soil-gas survey in July 1988 and installed two (2) well clusters (shallow, medium, and deep wells—total of six (6) additional wells) and conducted ground water and soil sampling in August 1988. Analysis of ground water from the monitoring wells detected the presence of various compounds in the ground water on Site in parts per billion (ppb) as follows:

<table>
<thead>
<tr>
<th>Compound</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>trichloroethylene</td>
<td>0.6 up to 597 ppb</td>
</tr>
<tr>
<td>trichloroetheneol</td>
<td>0 up to 8.3 ppb</td>
</tr>
<tr>
<td>1,1-dichloroethene</td>
<td>0 up to 74.2 ppb</td>
</tr>
<tr>
<td>1,1-dichloroetheneol</td>
<td>0 up to 94.7 ppb</td>
</tr>
<tr>
<td>cis-1,2-dichloroethylene</td>
<td>0 up to 2000 ppb</td>
</tr>
<tr>
<td>trans-1,2-dichloroethylene</td>
<td>0 up to 0.6 ppb</td>
</tr>
<tr>
<td>benzene</td>
<td>0 up to 2.6 ppb</td>
</tr>
<tr>
<td>chloroform</td>
<td>0 up to 28.3 ppb</td>
</tr>
</tbody>
</table>

10. The Site's north-northeast property boundary is located at the south boundary of the city of Dayton's well field protection area. Analyses of ground water samples taken in September 1988 from well cluster #5, located 20 feet from the Respondent's north-northeast property boundary, showed levels of 1,1,1-trichloroethane up to 1830 ppb, 1,1-dichloroethene up to 86.4 ppb, cis-1,2-dichloroethene up to 2000 ppb, and 1,1-dichloroethene up to 55.3 ppb.

11. Currently the direction of local ground water flow from beneath the Site has been calculated to be toward the north-northeast, in the direction of the South Miami Well Field of the city of Dayton.

12. GeoSource performed a numerical ground water modeling study in October 1988 to evaluate the direction and rate of solute transport from the Site. According to this model, the leading edge of the ground water plume from Respondent would reach the South Miami Well Field of the city of Dayton within three (3) years; this is a worst-case scenario which could occur if no remedial action were taken.

13. Ground water samples from all monitoring wells taken in August 1989 by OHPA/SNCO and split with GeoSource showed maximum levels overall of the following contaminants: trichloroethene at 761 ppb; 1,1,1-trichloroethene greater than 1370 ppb; tetracloroethene at 20.2 ppb; 1,1-dichloroethene at 37.5 ppb; 1,2-dichloroethene at 1.6 ppb; 1,1-dichloroethene at 156 ppb; cis-1,2-dichloroethene at 793 ppb; trans-1,2-dichloroethene at 25 ppb; chloroform at 42 ppb.

1 Such constituent concentrations in ground water are above the safe drinking water standards.
14. Occurrence installed a soil vapor extraction system, and a ground water recovery and treatment system consisting of an extraction well and one air stripper at the Site. The need for air permits and the application to the Regional Air Pollution Control Agency (RAPPAC) alerted CERR to the problems and conditions at Respondent in early 1989. The above remediation efforts were installed without formal CERR oversight or formal approval.

15. The soil vapor extraction system consists of five (5) vapor extraction wells, designated VE1, VE2, VE3, VE4, and VE5. At present, the soil vapor extraction system which was operational for two (2) years is not operating.

16. The ground water recovery and treatment system required a National Pollutant Discharge Elimination System (NPDES) permit. Respondent was granted a five-year permit, CERR Permit No. 12N0000154420, effective date May 30, 1991 and expiration date May 27, 1996. The ground water recovery and treatment system remains in operation at the Site.


18. VOCs methylene chloride, tetrachloroethene, trichloroethene, trichloroethane, acetone, toluene, xylenes, methyl ethyl ketone, dichloroethene, dichloroethane, benzene, chloroform and the chemicals as listed above are "industrial wastes" and/or "other wastes" as defined in CERCLA Section 6111.01(C) and/or "hazardous waste" as defined in CERCLA Section 3734.01(C) and/or "hazardous substances" as defined in Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) as amended, 42 USC 9601.

19. Some of the VOCs and/or their possible components listed in paragraph 18 were discharged, deposited, injected, dumped, spilled, or leaked into or on the soil, ground water and surface water at the Site.

20. The discharging, depositing, injecting, dumping, leaking, spilling, or placing of industrial and other wastes into or on the soil, ground water, and surface water at or from the Site constitutes "disposal" of hazardous waste as defined in CERCLA Section 3734.01(F).

21. Any site at which such disposal occurs is a "facility" as that term is defined in CERCLA Section 3734.01(N). Respondent is a "facility" as the term is defined in CERCLA Section 3734.01(N).
22. The migration or threatened migration of these industrial wastes and other wastes into the soil, ground water, and/or surface water at or from the Facility constitutes a "release" or threat of a release as that term is defined in Section 101(22) of CERCLA, and the migration of industrial waste, other wastes and/or hazardous wastes and substances into "waters of the State" constitutes a discharge into waters of the State as that term is defined in CRC Section 6111.01(H).

23. The discharge of industrial waste, and/or other wastes, into the waters of the State without a valid permit or in amounts in excess of permissible amounts is prohibited by CRC Sections 6111.01 to 6111.04.

24. The release or disposal of industrial waste and/or hazardous waste from the Facility constitutes a substantial threat to public health or safety or is causing or contributing to or threatening to cause or contribute to air or water pollution or soil contamination within the meaning of CRC 3734.20(8).

25. Respondent is, or has been, an "owner" and/or "operator" as the term "owner" is defined in Ohio Administrative Code (OAC) Regulation 3745-50-10(A)(75), and as the "operator" is defined in CRC Regulation 3745-50-10(A)(74), of a facility as that term is defined in these Orders.

26. Respondent is or has been or is an "owner" or "operator" within the meaning of Section 107(a) of CERCLA, of a "facility" as that term is defined in Section 101(9) of CERCLA.

27. Respondent is a potentially "responsible person" within the meaning of Section 107 of CERCLA, and is a "person" as defined in Section 101(2) of CERCLA, and CRC Section 3734.01.

B. Based upon information available to the Director as set forth in these Findings of Fact, the Director has determined that the work required by these Orders, as set forth below, is in the nature of interim measures only. Such interim measures are designed to contain, abate, and mitigate the contamination. Respondent is nor released from any liability beyond the scope of these Orders.

C. A reasonable time for beginning and completing the actions required by these Orders has been provided herein.

D. The Director has given consideration to, and based his determination upon evidence relating to the technical feasibility and economic reasonableness of complying with these Orders, and upon evidence relating to conditions calculated to result from compliance with these orders. Further, the Director has determined that compliance with these Orders shall benefit the people of the State of Ohio and accomplish the purposes set out in CRC Chapters 6111 and 3734.
IV. ORDERS

A. Within thirty (30) calendar days of the effective date of these Orders, Respondent shall submit concurrently both a Quality Assurance Project Plan (QAPP) and a Site Assessment Report on the existing ground water monitoring and ground water extraction and treatment system, evaluating their abilities to monitor and prevent the further off-property migration of contamination. Should the Site Assessment Report show, in the opinion of CEPA, that the present ground water monitoring and recovery and treatment systems are inadequate to monitor and prevent the further off-property migration of contamination from sources at the Facility, Respondent shall submit a Design Work Plan as described below.

1. The Quality Assurance Project Plan (QAPP) shall adhere to the CEPA policy entitled, "Guidelines and Specifications for Preparing Quality Assurance Project Plans" and, in addition to the sixteen (16) specific items required as elements of a QAPP under Section 3.2 of the CEPA QAPP policy, shall include the following:

a. A Sampling and Analysis Plan (SAP) to be used to obtain ground water monitoring and analytical data. The SAP shall include, but is not limited to, the following:

i. Establishing an ongoing sampling protocol of the ground water and recovered ground water, parameters to be determined based upon (ii) below;

ii. Establishing one sampling event in which ground water will be sampled and analyzed for Target Compound List (TCL) compounds;

iii. Measuring ground water elevations and depth to the bottom of each well;

iv. Evacuating/purging each well and withdrawal of the sample;

v. Proper containment and disposal of the purge water;

vi. Analyzing in situ/field measured parameters including detection limits;

vii. Preservation and handling of samples, including duplicate analyses at separate laboratories for designated samples, trip blanks, field blanks, chain-of-custody, and laboratory quality assurance/quality control (QA/QC) reports that accompany sample results;

viii. The designated laboratory will simultaneously submit sample results directly to both Respondent and CEPA.
p. A Site Map depicting well locations and well construction logs for all wells on the Site.

2. OSPA shall review the QAPP and prepare written comments. In the event OSBA determines the QAPP is deficient, Respondent shall submit a revised QAPP incorporating or otherwise addressing to the satisfaction of OSBA such comments within twenty (20) calendar days from the date of receipt of OSBA’s comments. Any subsequent or additional work conducted by Respondent at the Facility for the purpose of complying with these Orders shall follow the requirements set forth in the approved QAPP.

3. The Site Assessment Report shall, at a minimum, include the following:
   a. A discussion of the hydrogeologic conditions at the Facility and identification of potential contamination pathways. This discussion shall include: descriptions of the vertical stratigraphy and hydraulic connection between lithologies; the velocity and horizontal and vertical direction of contaminant migration in all saturated units; and an evaluation of the factors influencing the contaminant movement in the aquifer.
   b. A discussion of the existing ground water monitoring system including the number, location, construction, and depth of existing monitoring wells, potentiometric maps, and how this system can be used to determine the effectiveness of the current ground water recovery system.
   c. A discussion of how the effectiveness of the existing ground water recovery and treatment system was determined, pertaining to its ability in preventing the further migration of contaminants from the Facility. This discussion shall include: the location and depth of the existing ground water extraction well; air stripper; efficiency of the air stripper; information on the design and construction of this system; and area of capture. It shall include aquifer parameters, i.e., conductivity, transmissivity, and storativity, etc.
   d. A discussion of the existing vapor extraction system, including the number, location, and depth of bores, and information on the design and construction of this system, including monitoring to determine radial influence and effectiveness of the system (removal efficiency and air emissions concentrations).
   e. A summary, which will discuss deficiencies and which will present recommendations for changes needed in both the existing ground water monitoring system and the existing ground water recovery and treatment system in order to prevent the further off-property migration of contamination from sources at the Facility.
4. CERCLA shall review the Site Assessment Report to determine whether the systems are capable of preventing the further off-property migration of contaminants from the Facility. If, based on CERCLA's review, CERCLA determines that the Site Assessment Report reveals that the current systems are adequate to prevent further off-property migration of contaminants, CERCLA shall notify Respondent by certified mail and begin monthly reporting pursuant to paragraph 13 of this Article.

5. If CERCLA determines that the Site Assessment Report reveals that the current system(s) are inadequate to prevent the further off-property migration of contaminants from the Facility, CERCLA shall comment and notify Respondent by certified mail and Respondent shall submit a Design Work Plan as described below. The Design Work Plan shall be submitted to CERCLA within thirty (30) calendar days after Respondent's receipt of CERCLA's comments.

6. If, based on its review, CERCLA determines that the Site Assessment Report does not contain sufficient and/or adequate data to determine the ability of these systems to effectively prevent the further off-property migration of contaminants from the Facility, CERCLA shall notify Respondent by certified mail of the types of data and information required to adequately assess the current system. Respondent shall submit within thirty (30) calendar days after receipt of CERCLA's comments, a proposal which outlines the means by which this data shall be obtained. Upon notification of approval by CERCLA of the proposal, Respondent shall implement the work necessary to obtain the supplemental data. Any additional field work (i.e., collecting new data to identify ground water movement, the determination of a capture zone, etc.) shall be completed within forty-five (45) calendar days following CERCLA approval of the proposal. Respondent shall notify CERCLA in writing when the additional field work is completed and will submit to CERCLA a revised Site Assessment Report twenty (20) calendar days after completion of any field work. If, in the opinion of CERCLA, the revised Site Assessment Report reveals that the current system(s) are adequate to prevent the further off-property migration of contaminants from the Facility, Respondent shall begin submitting monthly reports pursuant to paragraph 13 of this Section.

7. If, in the opinion of CERCLA, the revised Site Assessment Report reveals that the current systems are inadequate to prevent the further off-property migration of contaminants from the Facility and/or to effectively treat the ground water prior to discharge, Respondent shall submit a Design Work Plan to CERCLA within thirty (30) calendar days after receipt of CERCLA's comments. The Design Work Plan shall present the design, installation, operation and maintenance of a ground water extraction and treatment system that shall establish hydraulic gradient control to prevent further off-property migration of contamination.
8. The Design Work Plan shall detail all necessary modifications to the existing system(s) for construction of an extraction/gradient control system to prevent the further off-property migration of contamination. The Design Work Plan shall, at a minimum, include the following:

a. A discussion of the technical factors of importance for modifications to the existing monitoring and extraction/gradient control system;

b. A justification for selection of the preferred system and/or system modifications and location(s) based on the hydrogeology at the site, the location of the plume, and the types and concentrations of contaminants present;

c. Extraction/gradient control system construction equipment and specifications (i.e., wells, pumps, pipes, containment structures, tanks, air stripper, trenches, sumps/collection points, etc.), pumping cycles and rates, waste water disposal and/or treatment, preventative maintenance plans, and the area of capture;

d. Treatment, storage, or disposal of contaminated ground water pumped out of the extraction/gradient control system in a manner that complies with federal and state laws, requirements, and all corresponding guidance documents adopted thereunder. Respondent shall obtain any permits necessary for the implementation of the obligations contained herein. OSRA shall consider, in a timely manner, such permit applications which Respondent may be required to submit pursuant to the work required to be performed under these Orders;

e. A schedule of tasks, lengths of tasks, and completion times, including any permits, permits-to-install, and the required submittals of the deliverables as required herein according to calendar days; and

f. A monitoring strategy to ensure compliance with these Orders, (i.e., ground water elevation data, flow maps, ground water sampling parameters and frequency, etc.).

9. In the event Respondent is required to submit a Design Work Plan pursuant to either Order No. 5 or No. 7 above, OSRA shall review the Design Work Plan, prepare comments, if necessary, and notify Respondent thereof by certified mail. Respondent shall submit a revised Design Work Plan incorporating or otherwise addressing to satisfaction of OSRA, such comments within twenty (20) calendar days from the date of receipt of OSRA’s comments.

10. The Design Work Plan shall be implemented pursuant to the schedule in the approved Design Work Plan.
11. Within sixty (60) calendar days after completion of any required upgrade of the extraction/gradient control system(s) and/or modification outlined in the approved Design Work Plan, Respondent shall submit a report to ODEA establishing the effectiveness of the system(s) including, if appropriate: the area of capture in the aquifer, aquifer parameters (i.e., conductivity, transmissivity, storativity), potentiometric maps, and any changes in operation necessary to collect, contain, and/or treat contaminated ground water and, if applicable, the discharge or disposal of treated ground water, air emissions concentrations, and stripper efficiency.

12. If, based upon the report described in paragraph 11 of this Article, ODEA determines that the system(s) are insufficient to prevent the further off-property migration of contaminants from the Facility, additional measures shall be proposed by Respondent to further prevent the off-property migration of contaminants. Such additional measures shall be approved by ODEA and implemented according to an approved schedule.

13. Upon the effective date of these Orders, Respondent shall provide Monthly Progress Reports covering the previous calendar month to ODEA on or before the 15th day of each month. These monthly progress reports shall include, at a minimum, the following information:

a. A description and estimate of the percentage of the interim actions completed;

b. Summaries of all the relevant findings, including flow maps based on monthly water level measurements, and when appropriate, sample results, pumping rates and air stripper efficiency rate(s);

c. An evaluation of the effectiveness of the ground water gradient control/treatment system in preventing off-property migration of contaminants;

d. Summaries of all changes made in the interim actions during the reporting period;

e. Summaries of all contacts with representatives of the local community, public interest groups, or city and State agencies and government during the reporting period;

f. Summaries of all problems or potential problems encountered during the reporting period;

g. All actions being taken to rectify the problems;
h. Changes in key personnel or ownership/lease transfers during the reporting period;

i. Summaries of the projected work for the next reporting period;

j. Copies of daily reports, inspection reports, tabulated laboratory and monitoring data, effluent monitoring data, QA/QC reports, etc.

During the Site Assessment Report and, if necessary, Design Work Plan phases, monthly progress reports need not contain parts h., c., and d. of this paragraph. In the month immediately following the conclusion of the Site Assessment Report and, if necessary, Design Work Plan phases, the monthly progress reports shall include, at a minimum, parts a. through j. of this paragraph.

After Respondent submits six (6) consecutive monthly progress reports following conclusion of the Site Assessment Report and, if necessary, Design Work Plan phases, Respondent may petition, in writing, to CEPA for a reduction in frequency of such reporting. CEPA shall evaluate whether progress reporting shall be continued on a monthly basis or whether such reporting by Respondent shall be submitted less frequently. CEPA shall notify Respondent in writing of its evaluation and determination regarding continued progress reporting.

14. Respondent shall require its laboratories or contractors to deliver all raw monitoring data collected pursuant to these Orders to the CEPA Site Coordinator simultaneously with its delivery to Respondent.

15. Respondent shall require its laboratories or contractors to deliver all analytical data collected pursuant to these Orders to the CEPA Site Coordinator simultaneously with its delivery to Respondent.

16. Respondent shall prepare and deliver all reports required in these Orders or the workplans according to the schedule contain within these Orders or approved workplans.

V. DESIGNATED SITE COORDINATORS

A. Respondent and CEPA shall each designate a Site Coordinator and one or more alternates for the purpose of overseeing the implementation of these Orders. To the maximum extent possible, except as specifically provided in these Orders, communications between Respondent and CEPA concerning the terms and conditions of these Orders shall be made between the designated Site Coordinators. Each designated Site
Coordinator shall be responsible for assuring that all communications from the other party are appropriately disseminated and processed. The Site Coordinators shall attempt to resolve disputes informally through good faith discussion on the technical issues.

B. Without limitation of any authority conferred on OBRA by statutes or regulations, OBRA Site Coordinator's authority includes, but is not limited to: (1) taking samples or, in accordance with the terms of any workplan, directing the type, quantity and location of samples to be taken by Respondent; (2) observing, and taking photographs and making such other reports on the progress of the work as deemed appropriate; (3) directing that work stop, whenever the OBRA Site Coordinator determines that activities at the Site may uncover or create a threat to public health or welfare or the environment; and (4) reviewing records, files and documents relevant to these Orders.

C. Respondent's designated Site Coordinator or any alternate(s) shall be present on-site or on call during all hours of work at the Site and shall make himself/herself available for the pendency of these Orders. The absence of OBRA Site Coordinator from the Site shall not be cause for stoppage of work unless otherwise provided.

D. Each party may change its respective Site Coordinator by notifying the other party in writing at least five (5) days prior to the change.

E. All parties with access to the Site where work is to be performed pursuant to these Orders shall comply with all applicable laws and regulations for health and safety at the Site.

VI. DISPUTE RESOLUTION

A. The Site Coordinators shall, whenever possible, operate by consensus; and in the event that there is a disagreement over disapproval of any report or plan, disagreement about the conduct of the work performed under these Orders or Workplans, or modified or additional work or schedules required under these Orders, or disagreement over the amount claimed by OBRA for oversight or response costs, the Site Coordinators shall have five (5) days to negotiate in good-faith in an attempt to resolve the differences.

B. In the event that the Site Coordinators are unable to reach consensus on the disapproval or disagreement in five (5) days, then each Site Coordinator shall reduce her/his position to writing within seven (7) days of the end of the good-faith negotiations referenced above. Those written positions shall be immediately exchanged by the Site Coordinators. Following the exchange of written positions, the parties shall have an additional seven (7) days to resolve their differences. During this seven (7)-day period Respondent shall have the opportunity
to discuss resolution of the dispute with the District Unit Supervisor, Division of Emergency and Remedial Response (DERR), with appropriate participation by Central Office management. The Respondent may meet with the District Unit Supervisor, in person, if practicable. If the District Unit Supervisor is not available, a designee with comparable authority, shall confer by telephone or may meet with the Respondent in person. After seven (7) days, the matter will be referred to the District Unit Supervisor, or her/his designee, for a decision based upon and consistent with the purpose of these Orders. If the dispute is still not resolved, the matter may be referred to a Section Manager or her/his designee, Central Office, DERR, for a final resolution. If OERPA concurs with the position of Respondent, OERPA shall make the appropriate modifications and variances.

C. If OERPA does not concur with the position of Respondent, OERPA shall resolve the dispute based upon and consistent with these Orders, approved Workplans, State law and regulations promulgated thereunder and any appropriate federal laws or regulations.

D. OERPA shall provide Respondent with OERPA's decision concerning the dispute in writing. It is OERPA's position that OERPA's decision is not a final "action" or "act," as defined in ORC Section 3745.04. However, Respondent reserve any rights it may have to claim that OERPA's decision is a final "action" or "act."

E. The pendency of dispute resolution set forth in this Article shall not affect the time period for completion of work to be performed under these Orders or the Workplans, except that upon mutual agreement of the parties, any time may be extended as appropriate under the circumstances. Such agreement shall not be unreasonably withheld by OERPA. Elements of work not affected by the dispute shall be completed in accordance with the schedules contained in the Workplans.

VII. OTHER CLAIMS

Nothing in these Orders shall constitute or be construed as a release from any claim or cause of action or any demand in law or equity against any person, firm, partnership, or corporation, not a signatory or subject to these Orders from any liability arising out of or relating to the Facility.

OHIO E.P.A.
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POBOX DIRECTOR'S JOHN...
VIII. OTHER APPLICABLE LAWS

All work required to be taken pursuant to these Orders shall comply with the requirements of applicable local, state, and federal laws and regulations and shall be consistent with the National Contingency Plan ("NCP") 40 C.F.R. Part 300, as amended. Nothing in these Orders shall be construed as waiving or compromising in any way the applicability and enforcement of any other statutes or regulations applicable to Respondent's ownership and/or operation of the Facility. OORA and Respondent reserve all rights and privileges except as specified herein.

IX. REIMBURSEMENT OF COSTS

OORA has incurred and continues to incur oversight and response costs in connection with the Facility. Within thirty (30) calendar days of the receipt of the first accounting of past costs incurred up to the effective date of these Orders, Respondent shall remit a check to OORA for the full amount claimed. Prior to the expiration of these Orders, OORA shall submit to Respondent an itemized statement of all remaining costs, incurred by OORA pursuant to these Orders. Following receipt of the itemized statement, Respondent shall pay, within thirty (30) calendar days, the full amount claimed. Payment to OORA shall be made to the Ohio Hazardous Waste Clean-up Special Account created by O.R.C. Section 3734.28 by check payable to "Treasurer, State of Ohio" and shall be forwarded to OORA, the Fiscal Officer, Division of Emergency and Remedial Response, P. O. Box 1049, 1800 Watermark Drive, Columbus, Ohio, 43266-0149. A copy of the transmittal letter shall be sent to Counsel for Director of Environmental Protection, Division of Emergency and Remedial Response, at the same address.

X. NOTICE

All reports, documents, and notices demonstrating compliance with these Orders and/or which are required under these Orders and the workplan shall be submitted to the OORA at the following address or to such addresses as OORA hereafter designates in writing:

Ohio Environmental Protection Agency
Manager, DBRR/WRSS (1 copy)
P. O. Box 1049
1800 Watermark Drive
Columbus, Ohio 43266-0149

Kathy Fox (or successor)
Site Coordinator, DBRR/SEDD (1 copy)
Ohio Environmental Protection Agency
40 South Main Street
Dayton, Ohio 45402-2086
Director's Final Findings and Orders
Gem City Chemicals, Inc.
Page 15

Brian Nickel
DGR/SDDO (Loggy)
Ohio Environmental Protection Agency
40 South Main Street
Dayton, Ohio 45402-2086

All correspondence to Respondent shall be directed to the following:

Dave Stewart
Gem City Chemicals, Inc.
1287 Air City Avenue
Dayton, Ohio 45404

Mike Morris
Qsource Environmental Services, Inc.
2490 Technical Drive
Miamisburg, Ohio 45342

XI. RESERVATION OF RIGHTS

A. Nothing contained herein shall be construed to prevent OEPA from (1) seeking legal or equitable relief to enforce the terms of these Orders including penalties against Respondent for noncompliance (2) claims for natural resources damages; or completing any work described in these Orders. OEPA reserves the right to take any enforcement action, recover costs, or seek damages for injury to natural resources pursuant to any available legal authority for past, present, or future violations of O.R.C Chapters 3734 or 6111, conditions at the Facility, or releases of hazardous substances.

B. Because these Orders constitute an interim action, OEPA specifically reserves the right to perform or require Respondent to perform additional investigation, removal, or remediation at the Facility (including ground water investigation) pursuant to O.R.C Chapters 3734 or 6111 or other applicable authority for the above stated or any other conditions at the Facility. Nothing herein shall restrict the right of Respondent to raise any administrative, legal, or equitable defense with respect to such further actions which OEPA may seek to require of Respondent. Further, Respondent reserves any rights (s)he may have to raise any administrative, legal, or equitable defense in the event OEPA claims that Respondent is not in compliance with these Orders.

C. Except as provided herein, during the pendency of these Orders, OEPA agrees not to request initiation of court suit against Respondent for work being undertaken pursuant to these Orders and applicable federal, state, and local law.
XI. UNAVOIDABLE DELAY

A. Respondent shall cause all work to be performed within the agreed time schedules provided for in these Orders and/or any approved Workplan or Report, unless any such performance is prevented or delayed by an event which constitutes an unavoidable delay. For purposes of these Orders an unavoidable delay shall mean any event beyond the control of Respondent which prevents or delays performance of any obligation required by these Orders and which could not be overcome by due diligence on the part of Respondent. Increased costs of compliance shall not be considered circumstances beyond the control of Respondent.

B. Respondent shall notify OCPA in writing no later than seven (7) calendar days after discovery of the occurrence of any event which Respondent contends is an unavoidable delay. Such written notification shall describe the anticipated length of the delay, the cause(s) of the delay, the measures taken and/or to be taken by Respondent to minimize the delay, and the timetable under which these measures will be implemented. Respondent shall have the burden of demonstrating that the event(s) constitute(s) an unavoidable delay, and OCPA shall make any determination with regard to such a claim.

C. In the event that OCPA agrees that an unavoidable delay has occurred, these Orders, including incorporated documents and any affected schedules thereunder, may be modified if the unavoidable delay affects such schedules.

XII. WAIVER

In order to resolve disputed claims, without admission of fact, violation or liability, Respondent agrees that these orders are lawful and reasonable, and agrees to perform all actions required by these Orders.

Respondent hereby waives the right to appeal the issuance, terms and service of these Orders and hereby waives any and all rights it may have to seek judicial review of such Consent Order either in law or equity.

Notwithstanding the proceeding, OCPA and Respondent agree that in the event that these Orders are appealed by any other party to the Environmental Board of Review, or any court, Respondent retains the right to intervene and participate in such appeal. In such event, Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless such Orders are stayed, vacated or modified.

IT IS SO ORDERED:

[Signature]
Donald R. Schregardus, Director
Ohio Environmental Protection Agency

[Stamp]
JUL. 6 1992
XIII. CONSENT

Respondent identified below hereby consents to the issuance of these Orders and to the terms herein, and hereby waives any right to appeal the issuance of these Orders. Furthermore, signatory certifies that (s)he is fully authorized to enter into the terms and conditions of these Orders and to legally bind Respondent so represented by her/him to these Orders.

IT IS SO AGREED:

GEM CITY CHEMICALS, INC.

By: [Signature]

David A. Stewart, President

Typed name & title

[Date]

[Handwritten Note]

OHIO EPA.

JUL-6 82

[Handwritten Note]

[Handwritten Note]