

**ANN ARBOR CITY COUNCIL MINUTES  
WORKING SESSION - OCTOBER 13, 1997**

The working session of the Ann Arbor City Council was called to order at 7:02 p.m. in the City Hall Council Chamber by Mayor Ingrid B. Sheldon.

**ROLL CALL OF COUNCIL**

**PRESENT :** Councilmembers Tobi Hanna-Davies, Patricia Vereen-Dixon, Jane Lumm, Jean Carlberg, Heidi Cowing Herrell, Patrick A. Putman, Christopher Kolb, Elisabeth L. Daley, Mayor Ingrid B. Sheldon, 9.

**ABSENT :** Councilmembers David Kwan, Stephen C. Hartwell, 2.

**CITY/COUNCIL MAINTENANCE FACILITY UPDATE**

Associate Administrator Ronald Olson and Public Services Director William Wheeler presented a progress report on the plans to consolidate city and county maintenance functions at a new City/County Operations and Maintenance Facility.

Mr. Wheeler introduced the members of the City/County employee team who gave a slide presentation showing the inefficiencies and unsafe conditions of the outdated maintenance facilities at 415 W. Washington St., 721 North Main St. and 2201 Hogback Rd. The group worked with a consultant team for the past seven months to look at more efficient operations to determine design criteria, site selection and layout for a new facility. The following employees, representing the various operation groups from the three facilities, participated on the team: Tom Freeman, Washtenaw County; Rick Kehres, Fleet Services; Carl Graham, Washtenaw County Garage; Ken Aungst, Radio Shop; Eltori Miller, Signs and Signals; Jeff Harmon, Parking System; Shelley Jones, Parking Enforcement; Roger Cole, Solid Waste; Al Bond, Forestry; Gary Fichter, Park Operations; Mike Scott, Transportation; Jack Gould, Fleet Services; Bill Lawrence, Forestry; Tom Weber, Washtenaw County; Daryl Kooperman, Park Operations; Gary Wilson, Street Maintenance; and John Newman, Solid Waste.

Consultants Mike Harvey, of McNamee, Porter & Seeley; Mark Probst, of Fleet Maintenance; and John Hinkley, of Hobbs and Black, presented slides of recently constructed maintenance facilities in other cities and an overview of the planning process for the proposed City/County facility. Mr. Harvey reviewed the site selection

process and reported that the City-owned landfill site, near Stone School and Ellsworth Roads, is the leading property out of five sites being considered for the facility. Mr. Hinkley reported that the next steps in the process include updating the cost estimate, investigating financing options, analyzing possible privatization of some of the maintenance functions, and obtaining public input.

Questions from Council followed the presentation.

(A City/County Maintenance Facility Progress Report, including preliminary site and floor plan drawings, on file in the City Clerk's Office).

### GLOBAL POSITIONING SYSTEM AIRPORT APPROACHES

Public Services Director William Wheeler stated that the purpose of this working session is to review the recommendation for global positioning system (GPS) approaches at the Ann Arbor Municipal Airport. Mr. Wheeler explained that the GPS, which is based on satellite navigation, provides more accuracy and safety for air navigation.

Burton Lamkin, Chair of the Airport Advisory Committee, stated that GPS approaches for the Ann Arbor Airport were considered at the request of the FAA and State Aeronautics Bureau. He reported that a task force was formed to examine the issues, and that the Airport Advisory Committee unanimously supported the plan for GPS approaches and is requesting Council's approval.

Airport Manager James Hawley explained that the GPS is a new technology that will bring safety and accuracy to air navigation and reduce noise impacts. He stated that GPS approaches will not change the airport facility or the operation of aircraft using the airport. Mr. Hawley reported that the FAA is systematically converting the current navigation system, which uses radio signals, from ground-based equipment to a satellite-based system. He further reported that the FAA can only develop about 500 GPS approaches each year, and that Ann Arbor's request may not be fulfilled for the next two to three years.

Finlay Beaton, Chief Flight Instructor of the University of Michigan Flyers, explained the technical aspects of the Global Positioning System. Mr. Beaton stated that the higher tolerances and straighter nature of the GPS approaches will help to enhance safety at the airport.

Bobby Crees, University of Michigan Survival Flight pilot, stated that Survival Flight,

which is an extension of University of Michigan Hospital, provides rapid response and specialized life-support to critically ill or injured patients. He requested that Council approve three additional GPS approaches to enhance Survival Flight=s capabilities and reduce helicopter noise in the community. Mr. Crees reported that the University of Michigan Health Systems will incur the cost for the installation and maintenance of the approach to the hospital.

Questions from Council followed the presentation.

(Approach maps on file in the City Clerk=s Office).

#### ADJOURNMENT

There being no further business to come before Council, the Mayor declared the meeting adjourned at 9:35 p.m.

W. Northcross  
Clerk of the Council

Janet L. Chapin  
Recording Secretary



**ANN ARBOR CITY COUNCIL MINUTES  
CONTINUED REGULAR SESSION OF OCTOBER 6, 1997 -**

**OCTOBER 13, 1997**

The continued regular session of the Ann Arbor City Council was called to order at 9:35 p.m. in the City Hall Council Chamber by Mayor Ingrid B. Sheldon.

**ROLL CALL OF COUNCIL**

**PRESENT :** Councilmembers Tobi Hanna-Davies, Patricia Vereen-Dixon, Jane Lumm, Jean Carlberg, Heidi Cowing Herrell, Patrick A. Putman, Christopher Kolb, Elisabeth L. Daley, Mayor Ingrid B. Sheldon, 9.

**ABSENT :** Councilmembers David Kwan, Stephen C. Hartwell, 2.

**MOTIONS AND RESOLUTIONS (CONT.)**

Councilmember Kolb moved that the resolution approving a closed session to discuss litigation strategy in pending litigation and to discuss strategy regarding collective bargaining negotiations be added to the agenda.

On a voice vote the Mayor declared the motion carried.

**R-435-10-97 APPROVED**

**RESOLUTION APPROVING CLOSED SESSION TO DISCUSS  
LITIGATION STRATEGY IN PENDING LITIGATION AND TO DISCUSS  
STRATEGY REGARDING COLLECTIVE BARGAINING NEGOTIATIONS**

Whereas, The City Attorney has requested a closed session to discuss litigation strategy in a lawsuit brought against the City and others by Gelman Sciences;

Whereas, The City Attorney has requested a closed session to discuss litigation strategy in the Traver Lakes lawsuit which was brought against the City;

Whereas, The City Administrator has requested a closed session to discuss strategy regarding negotiation of collective bargaining agreements; and

Whereas, A discussion in open meeting of the City=s litigation strategy in either of the foregoing lawsuits would have an adverse financial effect on the City=s litigation position;

RESOLVED, That the City Council recess to a closed session to discuss litigation strategy in the Gelman Sciences and Traver Lakes lawsuits, and to discuss strategy regarding negotiation of collective bargaining agreements.

Councilmember Carlberg moved that the resolution be adopted.

On roll call the vote was as follows:

Yeas, Councilmember Hanna-Davies, Lumm, Carlberg, Herrell, Putman, Kolb, Daley, Mayor Sheldon, 8;

Nays, 0;

Absent during vote, Councilmember Vereen-Dixon, 1.

The Mayor declared the motion carried and the meeting recessed at 9:37 p.m.

Councilmember Carlberg moved that the continued regular session of Council be reconvened.

On roll call the vote was as follows:

Yeas, Councilmembers Hanna-Davies, Vereen-Dixon, Lumm, Carlberg, Herrell, Kolb, Daley, Mayor Sheldon, 8;

Nays, 0;

Absent during vote, Councilmember Putman, 1.

The Mayor declared the motion carried and the continued regular session reconvened at 11:11 p.m.

\*\*\*\*\*

**R-436-10-97 APPROVED**

**RESOLUTION TO ACCEPT CERTIFICATION OF PORTIONS  
OF ALLISON DRIVE, CLARENDON DRIVE, CENTER DRIVE,  
EVERGREEN DRIVE, GLENWOOD STREET, BARBER AVENUE,  
VALLEY DRIVE AND DEXTER-ANN ARBOR ROAD RIGHTS-OF-WAY**

Whereas, On September 19, 1997 the Board of County Road Commissioners of the County of Washtenaw approved a resolution relinquishing certification of portions of Allison Drive, Clarendon Drive, Center Drive, Evergreen Drive, Glenwood Street, Barber Avenue, Valley Drive, and Dexter-Ann Arbor Road;

Whereas, Act 51 of the Public Acts of 1951, as amended, provides for the transfer of certification of right of way between jurisdictions;

Whereas, The acceptance of this right-of-way would increase annual State Weight and Gas Tax Revenue in the City's Major and Local Street Fund; and

Whereas, Gelman Sciences, Inc. is proposing to place pipeline in these rights-of-way as part of its effort to clean up contaminated groundwater and placing the rights-of-way under a single jurisdiction would ease the regulation of said pipeline;

**RESOLVED**, That the City accept the certification of the following described public rights-of-way:

1. Allison Drive northerly from Dexter-Ann Arbor Road, a distance of 777 feet.
2. Clarendon Drive northerly from Valley Drive, a distance of 456 feet.
3. Center Drive northerly from Dexter-Ann Arbor Road, a distance of 132 feet.
4. Evergreen Drive northerly from Valley Drive, a distance of 165 feet.
5. Glenwood Street southerly from Dexter-Ann Arbor Road, a distance of 175 feet.
6. Barber Avenue northerly from a point 264 feet north of Dexter-Ann Arbor Road, a distance of 308 feet.
7. Valley Drive westerly from a point 130 feet west of Glenwood Street, a distance of 1,153 feet.

- 8. Valley Drive easterly from a point 68 feet west of the west right-of-way line of Clarendon Drive to Dexter-Ann Arbor Road, a distance of 1,170 feet.
- 9. Dexter-Ann Arbor Road from a point 549 feet west of Maple Road to a point 529 feet east of Archwood Drive, a distance of 644 feet.

RESOLVED, That the Street Administrator be authorized to alter the official City of Ann Arbor Act 51 certification map to reflect this acceptance and submit this resolution, along with the resolution relinquishing the certification of these rights-of-way by the Washtenaw County Board of Road Commissioners, to the Michigan State Department of Transportation.

Councilmember Kolb moved that the resolution be adopted.

On a voice vote the Mayor declared the motion carried.

\*\*\*\*\*

**POSTPONED**

**RESOLUTION TO APPROVE GELMAN SCIENCES, INC. (GSI)  
REQUEST FOR EXTENSION TO DISCHARGE TREATED GROUNDWATER INTO  
THE SANITARY SEWER FROM THE EVERGREEN TREATMENT FACILITY**

Whereas, Resolution No. R-583-12-96 approved GSI's request dated November 13, 1996, to discharge treated water into the sanitary sewer until May 10, 1997;

Whereas, On December 16, 1996, Council approved the Resolution Regarding the Immediate Clean Up of GSI's Groundwater Contamination, No. R-583-12-96, and imposed effluent concentration limits for 1,4-dioxane of 3 parts per billion ( ppb) as an average monthly limit and 10 ppb as the single day maximum, and resolved that prior to any Council consideration to approve future GSI discharge, the following four conditions are required:

- 1. a state-approved remedial investigation plan and/or work plan directly related to each request;
- 2. all necessary associated state permits or exemptions;

- 3. GSI=s agreement to comply with all applicable monitoring and reporting requirements of the City; and
- 4. adherence to the terms and conditions of the 1992 agreement and Industrial User Permit (IUP) No. 041093 including reapplication for the agreement and the IUP;

Whereas, GSI has satisfied the above conditions and has applied for the reapplication of the 1992 agreement and the IUP for an extension to discharge treated water from the Evergreen Treatment Facility into the sanitary sewer until November 1, 1999 as a secondary means of disposal so that operation of the facility is not interrupted;

Whereas, The continuous operation of the Evergreen Treatment Facility is necessary to continuously operate the Evergreen/Allison Remediation System;

RESOLVED, That Council approve an extension to GSI to discharge treated water from the Evergreen Treatment Facility into the sanitary sewer until November 1, 1999, in accordance with the Industrial User Permit, and that the Mayor and City Clerk be authorized to sign an updated agreement in a form approved by the City Attorney.

Councilmember Kolb moved that the resolution be adopted.

Councilmember Kolb moved that the resolution be postponed until the October 20, 1997 regular session of Council to have questions reviewed by staff.

On a voice vote the Mayor declared the motion carried.

\*\*\*\*\*

**R-437-10-97 APPROVED AS AMENDED**

**RESOLUTION TO APPROVE USE OF THE PUBLIC RIGHT-OF-WAY  
FOR GELMAN SCIENCES, INC. EVERGREEN/ALLISON AREA PIPELINE  
PROJECT TO REMEDIATE CONTAMINATED GROUNDWATER**

A resolution to approve the use of the public right-of-way for Gelman Sciences, Inc. Evergreen/Allison area pipeline project to remediate contaminated groundwater was considered.

Councilmember Kolb moved that the resolution be adopted.

Councilmember Kolb moved that the resolution be amended as follows:

*Fifth Paragraph:*

**RESOLVED, That the City of Ann Arbor grant Gelman Sciences, Inc. the temporary use of public right-of-way...as proposed in Exhibit A as modified by and subject to the conditions of Exhibit B. NO PERMIT SHALL BE ISSUED OR CONSTRUCTION ALLOWED TO PROCEED UNTIL CONDITIONS IN EXHIBIT B ARE MET; and**

*Exhibit B:*

11. Dual-walled, HDPE pipe shall be used or another form of secondary containment satisfactory to the City shall be provided ~~<in the event of a leak>~~. (See also 48.B.)
58. For the term of this ROW Permit, P/GSI shall maintain an Industrial User Permit and authorization to discharge treated groundwater to the City Sanitary Sewer to maintain continuous operation of the EARS while the new re-injection well is being installed and for maintenance and/or shutdowns of the injection well **FOR MAINTENANCE AND REHABILITATION OF THE INJECTION WELL.**

On a voice vote the Mayor declared the motion carried.

The question being the resolution as amended, on a voice vote the Mayor declared the motion carried.

The resolution as adopted reads as follows:

**R-437-10-97**

**RESOLUTION TO APPROVE USE OF THE PUBLIC RIGHT-OF-WAY FOR GELMAN SCIENCES, INC. EVERGREEN/ALLISON AREA PIPELINE PROJECT TO REMEDIATE CONTAMINATED GROUNDWATER**

Whereas, Gelman Sciences, Inc. has requested the use of the City of Ann Arbor=s public right-of-way to place pipeline in the Evergreen/Allison area as part of its plan to remediate contaminated groundwater;

Whereas, The Michigan Department of Environmental Quality has approved

the remediation workplan proposed by Gelman Sciences, Inc.;

Whereas, The City of Ann Arbor is required by a court ordered stipulation to take action on the request by Gelman Sciences, Inc. for use of the public right-of-way for the Evergreen/Allison Area Pipeline Project; and

Whereas, The City of Ann Arbor has received and reviewed plans dated August 29,1997 (Exhibit A) and the documents specified in the stipulation;

**RESOLVED**, That the City of Ann Arbor grant Gelman Sciences, Inc. the temporary use of public right-of-way within the City of Ann Arbor to install the Evergreen/Allison Area Pipeline Project as proposed in Exhibit A as modified by and subject to the conditions in Exhibit B. No permit shall be issued or construction allowed to proceed until conditions in Exhibit B are met; and

**RESOLVED**, That the City Administrator or his designee be authorized to execute an agreement for occupancy of the right-of-way upon receipt from GSI of all the documented revised plans updated to reflect the required conditions and receipt of all other documents or legal instruments that may be required to fulfill the conditions set forth in the attached exhibits:

**EXHIBIT A**  
(on file in the City Clerk's Office)

**EXHIBIT B**

1. The City of Ann Arbor shall perform construction inspection during the installation of the pipeline at Gelman's expense.
2. Gelman will be charged for all actual City expenses associated with the right-of-way access including plan review and analysis, inspection, and post construction operations and maintenance.
3. Construction shall conform to City of Ann Arbor Public Services Department Standard Specifications, including obtaining required Federal and State permits and soil erosion control and lane closure permits.
4. Proper traffic control shall be maintained in accordance with the Public Services Department's Standard Specifications during all construction or maintenance activity.
5. The pipeline shall be jacked or bored under driveways, streets, sidewalks, and trees as required by the City, in accordance with the Public Services

**Department Standard Specifications.**

6. Any area disturbed during the pipeline installation or any maintenance activity including, but not limited to, trees, sidewalks, driveways, and streets shall be promptly restored or repaired to a condition as good or better than existed immediately prior to the installation or maintenance activity.
7. If the pipeline installation, well, and work trucks using Allison throughout the cleanup damage any portion of Allison Street, Gelman shall restore to like or better conditions.
8. A reproducible copy (Mylar) of the "as-constructed" plans of the well installation shall be submitted to the City within 30 days after the pipeline has been installed.
9. Pipeline marking tape shall be placed 12 inches above the pipe which is installed in an open cut trench.
10. Gelman shall comply with the requirements of "Miss Dig" as set forth in MCL 460.701 through MCL 460.718 and shall become a participating entity.
11. Dual-walled, HDPE pipe shall be used or another form of secondary containment satisfactory to the City shall be provided. (See also 48.B.)
12. There shall be an automatic (computer-operated) shut-off in an emergency. Reliance on a manual operator to perform a shut-off is not sufficient. (See also 48.D.)
13. Loss of pressure or flow reduction shall not be the sole means of determining leaks in the system, since these methods may only detect catastrophic failures, while slow leaks may not be detected. (See also 48.D.)
14. Purge wells shall be turned off when treatment system is not operating. This shall be by means of an automatic shut-off. (See also 48.D.)
15. The April 15th Amendment to the Revised Work Plan notes that the new injection well will be designed the same as the fouling-prone existing injection well, despite the request of the MDEQ that the new well be designed to minimize fouling. Instead, Pall/Gelman Sciences, Inc. (P/GSI) states that they will evaluate reducing the effluent peroxide and dissolved oxygen levels prior to injection. An effective well maintenance program can not be defined until the cause of the fouling is known. The cause of fouling shall be defined

and submitted to the City within 30 days of permit issuance. The new injection well must be designed specifically to facilitate the required form of maintenance. We have previously forwarded some suggestions. A number of vendors (e.g. Johnson Well Screen) have analytical programs to determine the cause of well fouling. Prior to making the well operational, P/GSI shall submit to the City for approval the routine maintenance program to maintain the long term integrity of the injection well.

16. City representatives shall be granted access to the treatment system at all times.
17. Gelman shall, at its expense, relocate the new pipeline at the request of the City of Ann Arbor, at any time, if the pipeline conflicts with activities related to City utilities, services, or improvements.
18. At the City's sole discretion, P/GSI shall either remove the pipeline when remediation is complete (and restore all disturbed property to equal or better than pre-removal condition) or abandon the pipeline in place after taking all steps satisfactory to the City to ensure that the abandoned line cannot cause environmental harm. At a minimum, P/GSI shall purge all water from the system, remove and fill all manholes, and cap and abandon pipe.
19. During all times that untreated purge water is in the pipeline, P/GSI shall obtain \$2,000,000 in liability insurance with no pollution exclusion, with a deductible (or retention, however named) no greater than \$5,000. The City shall be a named insured and shall have unconditional notice of cancellation no shorter than 30 days.
20. Performance bond in the amount of \$100,000 is required to assure restoration from construction.
21. Security in the amount of \$50,000 is required to assure removal/abandonment procedures for pipeline after remediation is complete. This must be posted before the pipeline becomes operational.
22. The Phase I injection well was initially located on Evergreen Drive. The most recent plans show the location has been moved to Valley Drive. The City of Ann Arbor is currently designing a system of ditches and culverts to manage storm water. The proposed location of this system runs along the north side of Valley Drive from the east side of Glenwood to the west side of Evergreen, as shown in Exhibit B.1. Any proposed pipeline which conflicts with this system must be relocated.

23. **14 days prior to construction, the pipeline location shall be staked for the residents to inspect and for the City to request additional directional boring locations, as needed.**
24. **Gelman has stated that the extraction well will be located on private property. The extraction well is shown in public right-of-way. The proposed location of the well should be corrected on the plans to reflect its actual proposed location.**
25. **There shall be no work performed outside of the public right-of-way without prior written consent from the property owner for such work. The City shall be provided a copy of all such written consent at least 3 business days prior to entry.**
26. **On the plans dated July 30, 1997, the pipeline was located 5 feet west of the easterly Allison Drive right-of-way line as requested by the City in a letter to Atwell-Hicks, Inc. dated June 17, 1997 from Cresson Slotten. However, on the plans dated August 27, 1997, the pipeline is shown on the west side of Allison Drive. For the same reasons stated in the June 17, 1997 letter as well as conflicts with mailboxes, shrubbery and the gas main, the pipeline is to be located a maximum of 5 feet west of the easterly Allison Drive right-of-way line.**
27. **The first manhole should be moved to the initial 90 degree bend at Allison Drive and Dexter-Ann Arbor Road. Manholes with sample ports shall be placed at all low points of the pipeline with a maximum distance between manholes and sample ports of 500 feet. (i.e. manholes needed with sample ports at approximately STA 3+90, STA 8+90, and STA 13+67) (See also 48.C.)**
28. **Gelman shall use manholes with steel covers to prevent the accumulation of water.**
29. **There are storm sewers in Center Drive and Archwood Drive which run into Dexter Ann Arbor Road. These must be shown in both plan and profile, checked for any conflicts, and, at least 14 days prior to staking submitted to the City for review.**
30. **All manholes shall be labeled as to type of manhole (i.e. s=sanitary sewer; r=storm sewer, w=water main, etc.)**
31. **The legend shall be revised to reflect all items found in drawings (i.e. pipeline to be bored, 8" pipeline, 4" pipeline, centerline of road, etc.)**
32. **At all times, the single-walled pipe may only be used to transport water treated to**

non-detect levels of 1,4-dioxane. (i.e. no contaminated water may pass through single-walled pipes) (See also 49.)

33. Access to construction must be provided at all times to the City for purposes of inspection. (See also 51.)
34. The purge well shall be sampled monthly for 1,4-dioxane for the life of the project. Results of these tests shall be submitted to the City within 7 days of analysis.
35. P/GSI must provide the City with a detailed construction schedule a minimum two weeks prior to construction.
36. All property owners adjacent to any construction activities must be identified on the plans by name and address. This has not been done for 593 Allison and 300 Glenwood.
37. In response to the Pipeline Operation and Maintenance Plan, Section 4B, the City requires that the sampling ports in the manholes continue to be checked for long-term or minor leakage monthly after the third month of operation for the life of the project.
38. All construction methods are to be specified as the best practices available for the situation.
39. To the fullest extent permitted by law, P/GSI shall indemnify, defend and hold harmless the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses including attorney's fees resulting or alleged to result, in whole or in part, from any act or omission, which is in any way connected or associated with activities associated with the permitted activities, by P/GSI or anyone acting on P/GSI's behalf associated with the permitted activities. P/GSI shall not be responsible to indemnify the City for losses or damages caused by or resulting from the City's sole negligence.

### Information To Be Provided

Information and requirements needed to evaluate and minimize continued need for occupation of the right-of-way and ensure that the ongoing occupation is not creating additional harm to adjacent or nearby properties shall be submitted and/or performed as follows:

40. The well logs, screen depths, surface elevations, well depths, and static water levels for all test, monitoring, purge and re-injection wells.
41. Iso-concentration contour maps for concentrations of 1 ppb, 10 ppb, 77 ppb, 100 ppb, 200 ppb, ....1000, 2000,...., 10,000, 15,000,...., 100,000 ppb. and vertical gradients of the plume, including all data, analysis, models and the name of the software and version number used to produce these maps. This information is to be provided for the plume:
  - A. As it exists now,
  - B. As it exists when the new purge well is placed into operation, and
  - C. As it is projected for 1, 2, and 3 years from when the new purge well is placed into operation.
42. The projected zone of influence of the new purge well to insure that the operation does not adversely draw down adjacent residents= wells.
43. A detailed monitoring plan for the Phase I - Evergreen-Allison Remediation System (EARS). The plan shall include, but not necessarily be limited to, a complete list of all parameters to be monitored to assess the system=s effectiveness. The plan shall include sampling locations, frequencies and analytical methodologies including method detection limits.
44. P/GSI shall submit to the City a detailed designs and operating and maintenance (O&M) plan for the proposed EARS components. The plan shall detail measures proposed by P/GSI for O&M of the proposed injection system. P/GSI has previously encountered serious difficulties with its injection system. The design and O&M plan shall specify P/GSI=s approach to prevent similar recurrences with the proposed (new) injection well. P/GSI shall list parameters (e.g., discharge pressure, flow) to be monitored for this purpose and detail the monitoring procedures. The plan should clearly specify contingency provisions and actions to be taken in the event the system, or any of its component systems, fails for any reason.

45. P/GSI shall submit to the City, on a monthly basis, status or monitoring reports documenting the performance of the EARS. These reports will include at a minimum flow and characterization data for untreated and treated groundwater, an analysis of the effectiveness of the EARS, updated maps showing the most current location of the 1,4-dioxane plume, and a history and explanation of any system downtime.
46. P/GSI shall submit a schedule acceptable to the City for submittal of the above requested documentation. No work shall begin until the schedule is approved by the City.

#### **System Design and Construction**

47. Additional monitoring wells shall be located within 30 days and shall be installed within 60 days of approval of this permit. These wells are to determine the location and rate of plume migration of the Evergreen System plume, including but not limited to the southern edge,
48. Purge well pipeline
  - A. The proposed purge well pipeline to be installed in the public right of way shall be suitable for the transportation of contaminated water from Allison to Evergreen and constructed and operated to prevent any possibility for an accidental release of the contaminated water into the surrounding environment.
  - B. The purge well pipeline shall be constructed of double wall High Density Polyethylene (HDPE), properly seamed at the joints as specified by the manufacturers. (See also 11.)
  - C. For the purge well pipeline monitoring and operation purposes, utility manholes shall be built along the pipeline route at intervals not exceeding 500 feet, with monitoring ports installed at every manhole. The manholes structure shall have steel covers wide enough for easy adequate access to monitoring ports and operational valves for shutting off the flow or for pipe pressure testing, as needed. (See also 27.)
  - D. The leak detection and alarm system for the purge well pipeline shall be installed to automatically shut the pipeline down and notify the operator in the case of an excessive pressure loss or loss in flow rate. The alarm shall consist of audible, visual and

telephone paging. This detection and alarm system is to be in continuous operation. (See also 12.-14.)

49. The re-injection well single wall pipeline shall be suitable for transporting only water treated to non-detect levels of 1,4-dioxane (i.e. no contaminated water may pass through single walled pipes.) (See also 32.)
50. All pipelines within the right-of-way shall be constructed so that, if any future extension are necessary for additional wells, these connections can be readily made.
51. Local government staff shall have access to inspect the construction. (See also 33.)

#### Operations and Maintenance

52. At all times properly operate and maintain all facilities and related appurtenances which are installed or used by P/GSI to achieve compliance with the conditions of this permit. Proper operation and maintenance includes: effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures.
53. For any modifications to these pipelines, P/GSI must submit a detailed report with supporting data so as to allow local governments to evaluate potential disruption or intrusion into other properties.
54. P/GSI shall notify the City and the Michigan Department of Environmental Quality (MDEQ) immediately of any system failure.
55. Copies of all tests, including results and analyses, relating to EARS must be provided to the City within 7 days of the testing and/or analysis.
56. If there is a material breach of the permit, P/GSI must cure it as soon as practicable. Failure to cure within 30 days is a per se refusal to correct as soon as practicable. Enforcement action shall be taken if P/GSI fails to cure as soon as practicable.
57. P/GSI shall allow any authorized representative of the City, to:
  - A. Inspect at reasonable times any facilities, equipment (including

monitoring and control equipment), practices, or operations regulated or required under this permit; and

- B. Have access to and receive copies of, at reasonable times, any record required to be kept under the conditions of this permit;
- C. Sample or monitor, at reasonable times, the EARS, including its process flows, for the purpose of determining:
  - i. Whether the management of the system may present an imminent and substantial hazard to the health of persons or to the natural resources, or is endangering or causing danger to public health or the environment; and
  - ii. Whether cause exists for an enforcement action, permit revocation, permit modification, denial of a permit renewal application, or to determine compliance with this permit.

If samples are taken for analysis, duplicate samples and a duplicate of the analytical results shall be furnished to P/GSI upon request.

- 58. For the term of this ROW Permit, P/GSI shall maintain an Industrial User Permit and authorization to discharge treated groundwater to the City Sanitary Sewer to maintain continuous operation of the EARS while the new re-injection well is being installed and for maintenance and/or shutdowns of the injection well for maintenance and rehabilitation of the injection well.

#### ADJOURNMENT

There being no further business to come before Council, the Mayor declared the meeting adjourned at 11:20 p.m.

W. Northcross  
Clerk of the Council

Janet L. Chapin  
Recording Secretary