BEFORE THE

ENVIRONMENTAL QUALITY COUNCIL

STATE OF WYOMING

IN THE MATTER OF THE PERMIT APPLICATION OF THE ASPENS WATER AND SEWER DISTRICT (ASPENS) AND ASPENS II WATER AND SEWER DISTRICT (TETON PINES), PERMIT NO. UIC 89-014	)	DOCKET NO. 2033-89

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

The above entitled matter came before the Environmental Quality Council for hearing on May 17, 1989 in Jackson, Wyoming. The Department of Environmental Quality, Water Quality Division, was represented by Assistant Attorneys General Thomas A. Roan and Steve Jones. The Applicants, the Aspens I Water and Sewer District and the Aspens II Water and Sewer District were represented by Peter F. Moyer. The Protestant David C. Adams was the spokesperson for the Protestants, which included Joseph and Denise Krewson, Lawrence E. Thal, William A. and Regena L. Field, Edward Knight, Linda Mengis, Lynn Wilcox, and the Teton Acres Property Owners Association.

Having considered the evidence before it and the arguments of the parties, the Environmental Quality Council hereby finds and concludes as follows:

FINDINGS OF FACT

1. The Department of Environmental Quality (the Department) received a permit application from the Aspens I and the Aspens II Water and Sewer Districts (Applicants) for underground injection of treated wastewater on January 19, 1989.

2. The Applicants have planned to construct and operate from one to five injection wells to inject treated municipal waste from the Aspens I/Aspens II Wastewater Treatment Plant. The Aspens II Water and Sewer District is also referred to as the Teton Pines Water and Sewer District.

3. The receiving aquifer is the alluvial aquifer associated with the Snake River.

4. Under the provisions of Chapter VIII of the Water Quality Rules and Regulations, the receiving aquifer is classified as Class I.

5. The permit proposed by the Department requires the treated wastewater, which is to be injected into the groundwater, to meet Class I standards at the wellhead.

6. Class I, as defined in Chapter VIII, Section 4.a.(1), is "water suitable for domestic use. The ambient quality of underground water of this suitability does not have a concentration in excess of any of the standards for Class I Groundwater of the State (See Table I, page 9)."

7. The Department reviewed the Applicants' submittal and found the application to be complete under Chapter IX, Section 6. of the Water Quality Rules and Regulations.

8. The Department proposed UIC Permit No. 89-014 be issued, and the Department provided notice to the public as required by Chapter IX, Section 7.a.(8) and Section 17, of the Water Quality Rules and Regulations.

9. Protests to the issuance of UIC Permit No. 89-014 were received from David C. Adams, Joseph and Denise Krewson, Lawrence E. Thal, William A. and Regena L. Field, Edward Knight, Linda Mengis, Lynn Wilcox, and the Teton Acres Property Owners Association (filed by Thomas Campbell, President).

10. Notice of the Protestants' hearing before the Environmental Quality Council was provided pursuant to Chapter IX, Section 18.

11. The Department proposed necessary revisions to the permit which had previously been determined to be complete. These revisions are to Protestants' Exhibit #4, which is attached as an appendix to this order (Appendix A), and which is incorporated herein by reference.

a. On Page 1, the class number should be changed from 5W10 to 5W12.

b. On Page 4, Section C should be added which states:

(1) Injection of any biological, hazardous, toxic, or potentially toxic materials or substances in concentrations which exceed maximum allowable concentrations based upon information of the EPA in the Federal Register for December 24, 1975 (Part IV), Water Programs, National Interim Primary Drinking Water Regulations and in the Federal Register for March 13, 1978 (Part II), Water Programs, Hazardous Substances is a violation of this permit.

(2) This injection shall not result in a violation of Chapter VIII Water Quality Rules and Regulations Section 4(d)(5).

c. On Page 4, the list of limitations for concentrations for various parameters should be revised to read as follows:

PARAMETER	CONCENTRATION (mg/l)
Total Dissolved Solids	500.0
Sulfates	250.0
Chlorides	250.0
BOD (5 day)	10.0
Ammonia	.50
Nitrate	10.0
Cyanide	0.2
Phenols	.001
Total Petroleum 1 Hydrocarbon	.50
Chlorinated Solvents (Total)	.005
Base Neutral Compounds (Total)	.005
Total Coliforms (number per 100 ml)	1

d. On Page 6, Section F. No.4, first paragraph, last sentence the word "wells" should be added after the word "monitor." The sentence will state:

"Additional monitor wells shall be installed if required by the administrator."

e. On Page 6, Section F, No.4, second paragraph, line 2, the words "these wells" should be changed to "these monitor wells and all idle injection wells."

f. On Page 6, Section F. No. 4, second paragraph, after line 2, the original language should be deleted and replaced with:

Exceeding any domestic use standard as spelled out in Chapter VIII of the Water Quality Rules and Regulations in a monitor well is a violation of this permit. Upon discovering such a violation, the permittee shall report the discovery to the Water Quality Division by telephone and shall resample the well in which the discovery was made within 24 hours. The permittee shall immediately

propose a plan, which is acceptable to the Water Quality Division, to identify and terminate the source of the violation. The permittee shall implement a plan to investigate and determine the source of the exceedance.

The permittee shall then submit a written report to the Water Quality Division within seven days. The report shall reference the telephone report and shall include Water Quality Division approved plans to investigate and remediate the violation and to prevent further violation.

g. On Page 6, Section F, No. 4, the list of concentration limits should be changed to the following:

PARAMETER	CONCENTRATION (mg/l)
Total Dissolved Solids	500
Sulfates	250
Chlorides	250
BOD (5 day)	10
Ammonia as N	.50
Nitrate as N	10
Cyanide	.2
Phenol	.001
Static Water Level	No higher than 6 inches below ground surface.

h. On Page 6, the following should be added to the list of parameters:

Total coliforms (number per 100 ml) 1

i. On Page 7, paragraph 2 should state:

The permittee shall analyze the effluent from the plant for the same list of parameters as the monitor wells. All parameters are to be tested once per week except total petroleum hydrocarbon, chlorinated solvents, and base neutral compounds which are to be tested once per quarter.

The original language should be deleted.

j. On Page 7, paragraph 4, line 1, the word "daily" should be deleted and replaced by the word "weekly." The sentence should state:

The injection pressure at each well shall be recorded weekly in the form of a static water level in each of the injection wells.

k. On Page 11, under Section P., Special Permit Conditions, a paragraph should be added which states:

> All systems in this plant are to be maintained in an operating condition.

12. The Applicants agreed to the above changes to the proposed permit.

13. The Protestants did not contest the above revisions to the proposed permit.

14. The Applicants have the obligation, under Chapter IX, Section 6., of the Water Quality Rules and Regulations, to provide a written evaluation of alternative disposal practices demonstrating that subsurface discharge is the best management alternative.

15. Best management alternative is defined in Chapter IX, Section 1 as:

> "... means the subsurface discharge operation or action described which, after problem assessment and examination of alternative methods, is proposed as the most practically effective (including technological, economic, environmental and institutional consideration) means of wastes management."

16. The testimony demonstrated that alternatives to subsurface discharge were evaluated and given consideration by the Applicants prior to designing the proposed system of underground injection wells.

17. The underground injection of the treated effluent is the best management alternative available to the Applicant Water and Sewer Districts.

18. In order to improve the contingency plan required by Chapter IX, Section 6.a.(12)(c), the Applicants proposed, and the Protestants did not object to, modifying the Applicants' Permit to Construct #88-502, to provide for a detention basin meeting the specifications attached hereto as Appendix B which is incorporated herein by reference,

capable of storing at least 48 hours of peak designed flows (400,000 gallons per day) of the plant. Upon discovering that the quality of the injectate does not meet Class I standards, the Applicants will immediately divert the wastewater to this detention pond. The Applicants will not inject the effluent into the wells until it again meets Class I standards.

19. In order to facilitate waste treatment in the area of the Aspens and the Teton Pines development, the Applicants proposed that the Aspens/Teton Pines wastewater treatment and water supply systems be supplemented to provide for an eight inch water line from the main Aspens/Teton Pines water distribution line to the boundary of the property described as the Hardeman 80 acres, and to provide for an eight inch line for wastewater from the Aspens/Teton Pines wastewater treatment plant to the property boundary of the Hardeman 80 acres. These lines will also service the Ed Knight property. A map showing this property is attached as Appendix C to this order, which map is incorporated herein by reference. The Applicants will provide up to twenty-eight free hook-ups for the Hardeman property and one free hook-up for Mr. Knight, with the limitation that any such users will have to provide their own distribution and collection systems, and will have to pay their reasonable share of operating and maintenance costs for the applicable Aspens/Teton Pines plant facility.

20. With the above revisions, the proposed permit UIC 89-014 meets all the applicable statutory and regulatory requirements.

21. Although the Protestants argued that waste treatment in the area west of the Snake River in Teton County, which includes that area to be serviced by the Aspens/Teton Pines wastewater plant and injection wells, had not been thoroughly addressed in the Aspens/Teton Pines wastewater plan or in other plans considered by the Teton County Board of County Commissioners, these matters cannot be addressed within the context of this permit.

CONCLUSIONS OF LAW

1. The Environmental Quality Council has jurisdiction over the parties to and the subject matter of this proceeding.

2. Objections to this permit were filed in a timely manner pursuant to Chapter IX of the Water Quality Rules and Regulations.

3. The public notice requirements of Chapter IX of the Water Quality Rules and Regulations were met.

4. Those revisions itemized in paragraphs 11.a through 11.k of the Findings of Fact should be incorporated into proposed Permit UIC 89-014.

5. As so revised, the Applicants have met their burden of demonstrating that UIC Permit No. 89-014 meets all statutory and regulatory requirements imposed by the State of Wyoming.

6. Changes to the Permit to Construct #88-502 affecting the Applicants' commitment to provide a detention basin (see Paragraph 18 of the Findings of Fact) and to provide for one eight inch line extending to the Applicants' waste treatment plant and one to the water system, with free hook-ups for specific property (see Paragraph 19 of the Findings of Fact) should be made prior to the beginning of operations under UIC Permit No. 89-014.

7. UIC Permit 89-014, as revised, should be issued.

ORDER

1. Those revisions set forth in the Findings of Fact, paragraphs 11.a through 11.k are hereby incorporated into UIC Permit No. 89-014.

2. All revisions to the Permit to Construct #88-502 necessary to place into effect the Applicants' commitments described in paragraphs 18 and 19 of the Findings of Fact, shall be made before operations under UIC Permit No. 89-014 begin.

3. UIC Permit No. 89-014, as revised by this order, is to be issued by the Department of Environmental Quality.

DATED THIS 13th day of September, 1989.

VINCENT R. LEE
Hearing Examiner

CERTIFICATE OF SERVICE

I, Terri A. Lorenzon, certify that at Cheyenne, Wyoming, on the 14th day of September, 1989, I served a copy of the foregoing Findings of Fact, Conclusions of Law and Order, by depositing copies of the same in the United States mail, postage prepaid, duly enveloped and addressed to:

David Adams
P. O. Box 155
Teton Village, WY 83025

Joseph & Denise Krewson
2225 N. Rendezvous Dr.
Teton Acres Subdivision
Wilson, WY 83014

Lawrence E. Thal
Box 353, Star Route
Jackson, WY 83001

Linda Mengis
4375 Nethercott
Jackson, WY 83001

Lynn Wilcox
7537 31st Avenue, NE
Seattle, WA 98115

David R. Finnegan
General Manager
Aspen Management
Box 25003
Jackson, WY 83001

Aspens/Teton Pines Water &
Sewer District
P. O. Box 25003
Jackson, WY 83001

William A. & Regena L. Field
2130 Nethercott Loop
P. O. Box 2784
Jackson, WY 83001

Teton Acres Property Assoc.
c/o Mr. Thomas Campbell, III
P. O. Box 540
Wilson, WY 83014

Edward Knight
1955 Willow Flats Road
P. O. Box 184
Wilson, WY 83014

Mike Potter
Star Route Box 362A
Jackson, WY 83001

Peter F. Moyer
P. O. Box 3682
Jackson, WY 83001

by hand delivery to:

William Garland, Administrator
Water Quality Division
Department of Environmental Quality
122 West 25th Street, Herschfler Building
Cheyenne, WY 82002

and by interoffice mail of the same date to:

Dennis Hemmer, Director
Department of Environmental Quality
122 West 25th Street, Herschler Building
Cheyenne, WY 82002

Tom Roan
Assistant Attorney General
Attorney General's Office
123 Capitol Building
Cheyenne, WY 82002

Steve Jones
Senior Assistant Attorney General
Attorney General's Office
123 Capitol Building
Cheyenne, WY 82002

Terri A. Lorenzon

TERRI A. LORENZON
Administrative Aide
Wyoming Environmental Quality Council
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DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE OF WYOMING
GROUNDWATER POLLUTION CONTROL PERMIT
AUTHORIZATION TO DISCHARGE INTO UNDERGROUND RECEIVERS
(Permit to Inject)

(X) New

( ) Modified

Permit Number:

UIC 89-014
UIC CLASS 5W10

In compliance with the Wyoming Environmental Quality Act (W.S. 35-11-101 through 1104, specifically 301(a)(i) through (iv), Laws 1973, Ch. 250, Section 1) and Water Quality Rules and Regulations Chapter IX (September 4, 1980),

The Aspens/Teton Pines Water and Sewer District
P.O. Box 25003
Jackson, Wyoming 83001
(307) 733-5518

FILED

JUN 15 1989

Terri A. Lorenzon, Adm. Aide
Environmental Quality Council

is authorized to operate

the Aspens/Teton Pines Wastewater Injection System

according to procedures and conditions of the application UIC 89-014 and requirements and other conditions of this permit.

This permit shall become effective on date of issuance.

_____ _____

Administrator
Water Quality Division
Herschler Building, 122 W. 25th
Cheyenne, WY 82002
Phone: (307) 777-7781

Date

_____ _____

Director
Department of Environmental Quality
Herschler Building, 122 W. 25th
Cheyenne, WY 82002

Date

APPENDIX A

REV 2/3/89

A. Discharge (Injection) Zone and Area of Review

The Area of Review for this facility has been established as a fixed Area of Review consisting of a circle of radius 1/2 mile centered around the injection well field located in T41N, R117W, Section 14, SW1/4, SW1/4, 6th P.M. The Area of Review includes all or parts of the following legally described parcels:

Township 41 North, Range 117 West, 6th P.M.

Section 14: W1/2E1/2; W1/2
Section 15: E1/2
Section 22: NE1/4NE1/4
Section 23: N1/2NW1/4

The above description includes some lands outside of the Area of Review, but it does include all lands within the Area of Review. The permittee has provided public notice to all owners of record within the 1/2 mile fixed Area of Review. The fixed Area of Review is supported by groundwater modeling showing that it is of adequate size.

B. Groundwater Classification

The receiving aquifer is the alluvial aquifer associated with the Snake River. This aquifer is class I under Chapter VIII of Water Quality Rules and Regulations. The permittee has provided data on the baseline water quality in this aquifer as follows:

PARAMETER	CONCENTRATION (mg/l)	PARAMETER	CONCENTRATION (mg/l)
Aluminum	<.01	Ammonia as N	<.03
Arsenic	<.001	Barium	.05
Beryllium	<.001	Bicarbonate	159
Boron	.09	Cadmium	<.001
Calcium	56	Carbonate	<.10
Chloride	14	Chromium	.003
Cobalt	<.01	Copper	<.01
Cyanide	<.001	Fluoride	.23
Iron	13.70	Lead	.008
Magnesium	4.8	Manganese	.10
Mercury	<.0002	Nickel	<.03
Nitrate as N	.28	Nitrite as N	<.02
Oil and Grease	<.1	Phenols	<.001
Potassium	.95	Selenium	<.001
Silver	<.001	Sodium	3.2
Sulfate	15	Total Dissolved Solids	175
Zinc	.05	pH	7.70
Acenaphthene	<.001	Acenaphthylene	<.001
Anthracene	<.001	Benzo(a)anthracene	<.001
Benzo(a)pyrene	<.001	Benzo(b)fluoranthene	<.001
Chrysene	<.001	Benzo(k)fluoranthene	<.001

PARAMETER	CONCENTRATION (mg/l)	PARAMETER	CONCENTRATION (mg/l)
Fluoranthene	<.001	Benzo(ghi)perylene	<.001
Fluorene	<.001	Dibenzo(a,h)anthracene	<.001
Naphthalene	<.001	Indeno(1,2,3-cd)pyrene	<.001
Phenanthrene	<.001	Pyrene	<.001
1,1,1-Trichloroethane	<.001	1,2-Dichloropropane	<.001
1,1,2,2-Tetrachloroethane	<.001	1,1,2-Trichloroethane	<.001
1,1-Dichloroethane	<.001	1,1-Dichloroethylene	<.001
1,2-Dichlorobenzene	<.001	1,2-Dichloroethane	<.001
1,2-Transdichloroethylene	<.001	1,3-Dichlorobenzene	<.001
1,3-CisDichloropropylene	<.001	1,4-Dichlorobenzene	<.001
1,3-TransDichloropropylene	<.001	Benzene	<.001
2,Chloroethylvinyl ether	<.001	Bromoform	<.001
Carbon Tetrachloride	<.001	Chlorobenzene	<.001
Chlorodibromomethane	<.001	Chloroethane	<.001
Chloroform	<.001	Dichlorobromomethane	<.001
Dichlorodifluoromethane	<.001	Ethylbenzene	<.001
Methyl Bromide	<.001	Methyl Chloride	<.001
Methyl Ethyl Ketone	<.001	Methyl Iso Butyl Ketone	<.001
Methylene Chloride	<.001	Tetrachloroethene	<.001
Toluene	<.001	Trichloroethene	<.001
Trichlorofluoromethane	<.001	Vinyl Chloride	<.001
Xylene	<.001	Total Volatile Organics	<.001

All effluents delivered to this aquifer through the injection wells shall meet class I standards. The following is an estimate of the average water quality to be injected:

Total Dissolved Solids	300 mg/l
Biological Oxygen Demand 5	5 mg/l
Total Suspended Solids	3 mg/l
Sulfates	50 mg/l
Chloride	55 mg/l
Ammonia	.5 mg/l
Nitrates	5.0 mg/l

The above data shows the design estimates submitted with the application. The above table does not set a limit on the injectate quality. Limits on injectate quality are discussed under Section C "Authorized Operations" and Section F "Environmental Monitoring".

C. Authorized Operations

The permittee is authorized to operate a system of one to five injection wells to inject treated municipal waste from the Aspens/Teton Pines Wastewater Treatment Plant. These wells shall meet or exceed the following construction standards:

a. All wells shall be constructed using 12 inch ID .250 inch wall thickness pipe either driven or installed in a borehole and sealed at the surface using concrete grout.

b. Injectate shall be delivered to the wells using a 10 inch subsurface delivery line equipped with a subsurface control valve.

c. The top of the well casing shall extend a minimum of 24 inches above grade and be equipped with a locking cap. All injection wells shall be kept locked at all times when measurements are not being made.

This system will also require monitor wells to be installed as shown in Section F4 of this permit. Monitor wells shall meet or exceed the following construction standards:

a. All wells shall be constructed using 6 inch ID .250 inch wall thickness pipe either driven or installed in a borehole and sealed at the surface using concrete grout.

b. The top of the well casing shall extend a minimum of 24 inches above grade and be equipped with a locking cap. All monitor wells shall be kept locked at all times when measurements are not being made.

The injection system shall be controlled so that standing water on the surface does not appear within a radius of 200 feet from the wells. This may require filling around the center of injection to insure that standing water is not formed.

The injectate shall not exceed the following limits at all times:

PARAMETER	CONCENTRATION (mg/l)
Total Dissolved Solids	400.0
Sulfates	100.0
Chlorides	100.0
BOD (5 day)	10.0
Ammonia	0.75
Nitrate	10.0
Cyanide	0.2
Phenols	.001
Total Petroleum1 Hydrocarbon	.50
Chlorinated Solvents (Total)	.005
Base Neutral Compounds (Total)	.005

The above table contains absolute permit limitations. Exceedance of any of the parameters shall be reported by telephone to the Water Quality Division within 24 hours of discovery. This telephone report shall be confirmed by letter within 7 days of discovery. The letter report shall contain a description of steps taken to correct the problem and a plan to insure that a recurrence does not occur.

D. Proper Operation and Maintenance

The permittee is required to conduct the operation in accordance with statements, representations and procedures presented in the complete permit application and supporting documents, as accepted and approved by the administrator.

The permittee is required at all times to properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve permit compliance. 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.

The subsurface discharge (injection) authorized by permit shall be consistent with the conditions and content of the permit; any modifications which will result in a violation of permit conditions shall be reported by submission of a new or amended permit application and shall not be implemented until a new or modified permit has been issued.

E. Entry and Inspection

The permittee shall allow the administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate rules and regulations of the Department, any substances or parameters at any location.

F. Environmental Monitoring Program for Groundwaters of the State

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. The permittee shall prepare records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation to be retained for a period of at least 3 years after closure of the facility.

3. Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;

b. The name(s) of individual(s) who performed the sampling or measurements;

c. The date(s) analyses were performed;

d. Names of individuals who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

4. The prescribed program for this permitted activity is as follows:

A system of three monitor wells shall be constructed spaced equally across the south side of the plant site. In addition, one well each shall be constructed as a monitor well on the northeast and northwest corners of the plant site. These wells shall penetrate the entire receiver that is open in the injection wells. Additional monitor shall be installed if required by the administrator.

Once a calendar quarter, or more often if the administrator requires, each of these wells shall be sampled and analyzed for the following list of parameters. The concentrations on this list form a "point of compliance" monitoring system. Exceedance of any of these parameters in any single monitor well shall be reported by telephone to the Water Quality Division within 24 hours of discovery. This telephone report shall be confirmed by letter within 7 days of discovery. The letter report shall contain a description of steps taken to correct the problem and a plan to insure that a recurrence does not occur.

PARAMETER	CONCENTRATION (mg/l)
Total Dissolved Solids	300
Sulfates	40
Chlorides	30
BOD (5 Day)	10
Ammonia as N	.40
Nitrate as N	2.0
Cyanide	.2
Phenol	.001
Static Water Level	No higher than 6 inches below ground surface.

G. Requirements for Monitoring the Discharge

Discharge (injection) volume and/or pressure shall be controlled and monitored to prevent fracturing of confining strata.

The permittee is required to monitor the discharge pressure, volume and average water quality.

The permittee shall analyze the effluent from the plant for the same list of parameters as the monitor wells. These analyses shall be done on the same schedule and on the same days as the analyses of the monitor wells. The quality limitations listed in Section C of this permit apply to the effluents.

The injected volume shall be recorded for each injection well on a chart recorder. The permittee is free to design a metering system using either a single recording meter on the entire effluent stream or a system using a separate meter on each of the wells. If a single meter system is used, records shall be kept showing which of the five wells are receiving effluent at all times. Changes made including shutting in of individual wells, constricting the flow to individual wells or opening up individual wells shall be recorded on the daily report. The injected volume shall not exceed 400,000 gallons per day as a total of all injection wells under this permit.

The injection pressure at each well shall be recorded daily in the form of a static water level in each of the injection wells. Once a week, the static water levels in all monitor wells required by this permit shall also be recorded. All of these readings shall be taken from the same point on the casing each time they are recorded.

At least once a year and more frequently if required by the administrator, the effluents shall be sampled and analyzed for volatile and semi-volatile organics by EPA methods 601, 602, and 610 as well as total petroleum hydrocarbon by EPA method 418.1.

The Water Quality Division shall be provided with as-built plans for all wells constructed along with a plan map showing all wells to a scale of 1"=100' and a relative elevation to the same datum of all well measuring points.

A quarterly report on this injection is required. These reports shall be due no later than 30 days after the close of each calendar quarter. The permittee is free to propose the use of fiscal quarters other than calendar quarters if this would ease his work load. Each of these reports shall contain the following information:

a. The injected volume for the entire facility for each month of the quarter. This is the total volume injected in all wells in gallons.

b. The static water levels of all wells taken on the day that analysis samples were taken.

c. The chemical analyses required under Sections C, F4, and G of this permit.

d. A report of any system upsets that occurred in the quarter.

e. A summary of any permit exceedances during the quarter.

After the third anniversary of this permit, the permittee shall produce a report showing a summary of the first three years of operation. This report shall recap the operation and evaluate the effectiveness of the environmental monitoring program required. At this time the permittee is free to propose other monitoring plans, to propose alternate schedules, or to propose different parameter lists.

H. Test Procedures

Test procedures for the determination of water quality parameters and constituents shall be in accord with provisions of Water Quality Rules and Regulations Chapter VIII, Section 7.

I. Records and Reports

1. The permittee shall retain copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the report or application.

2. The permittee shall give notice to the administrator as soon as possible of any planned physical alterations or additions to the permitted facility.

3. The permittee shall give advance notice to the administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

4. Monitoring results shall be reported at intervals specified in Section C and/or Section G of this permit.

5. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

6. The permittee shall report any noncompliance which may endanger health or the environment, orally within 24 hours from the time the permittee becomes aware of the circumstances. The report should include:

   a. Any monitoring or other information which indicates that any contaminant may cause an endangerment to a usable groundwater of the state.

   b. Any noncompliance with a permit condition or malfunction of the discharge (injection) system which may cause fluid migration into or between usable groundwaters of the state.

A written submission shall be provided within 5 days of the time the permittee becomes aware of the circumstances. This written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7. The permittee shall report all instances of noncompliance not reported otherwise, at the time monitoring reports are submitted; such reports shall contain the information listed in 6. above.

8. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the administrator, it shall promptly submit such facts or information.

9. The permittee shall retain all records concerning the nature and composition of injected fluids until 5 years after completion of any specified plugging and abandonment procedures. The administrator may require the owner/operator to deliver the records to the administrator at the conclusion of the retention period.

10. A subsurface discharge (injection) well may not commence subsurface discharge (injection) until, following public notice and an opportunity for hearing, a groundwater pollution control permit has been issued by the department for the proposed operation, and:

    a. Well construction is complete and the permittee has submitted notice of completion of construction to the administrator, and

    b. The administrator has inspected or otherwise reviewed the subsurface discharge (injection) well and finds it in compliance with the conditions of the permit; or the permittee has not received notice from the administrator of intent to inspect or otherwise review the facility within 13 days of the notice of a. above, in which case prior inspection or review is waived, and

    c. Well mechanical integrity testing has been proven or demonstrated to the satisfaction of the administrator.

11. Annual reports shall be submitted to the administrator within 30 days following the anniversary date of the permit.

12. A comprehensive report for an aborted or curtailed operation authorized by this permit shall be submitted to the administrator within 30 days of complete termination of the injection (discharge) or associated activity, in lieu of an annual report.

J. Permit Actions

After notice and opportunity for a hearing, a permit may be modified, suspended or revoked in whole or part during its term for cause which includes, but is not limited to, any of the following:

1. Violation of the permit;

2. Obtaining a permit by misrepresentation or failure of the discharge well or system.

Each permit is reviewed at least once every 5 years, and may be reviewed more frequently.

A permit may be modified at any time as may be required, including for conformity with changes in regulations or standards which occur after the permit is issued.

A permit may be modified in whole or part in order to apply more, or less, stringent standards; or prohibitions for a toxic or other substance present in the permittee's discharge, as may be ordered by the council.

This operation (permit) can be terminated by authority of the administrator for one or more permit violations.

Public notice of the permit review and request for public comment will be made every 10 years by the administrator.

K. Mechanical Integrity

Each discharge well and associated discharge facilities is required to have mechanical integrity which demonstrates the unimpaired condition of the well and facilities. The approved procedures for demonstrating the mechanical integrity for the well and facilities handling the discharge authorized by this permit consist of:

> There are no mechanical integrity requirements placed on this system. The very nature of the construction precludes meaningful mechanical integrity testing.

The operation (discharge) of any well or system will terminate immediately if mechanical integrity of the well or system fails and/or a leak or unauthorized fluid movement occurs. The discharge shall be discontinued until mechanical integrity has been restored and permission to continue the discharge has been obtained from the administrator.

L. Abandonment

The permittee shall notify the administrator at least 180 days before well abandonment. Immediately following the permanent cessation of subsurface discharge or related activity, or where a well has not been completed, the applicant/permittee shall notify the director and follow the procedures prescribed by the director for plugging and abandonment or the discontinuance of related activities:

> At the time of abandonment of any well constructed under this permit, the casing shall be jacked back out of the ground and the hole filled with a bentonite slurry having a 10 minute gel strength of 20 pounds per 100 square feet and filtrate volume not to exceed

13.5 cc. The top 20 feet of the hole shall be filled with concrete designed to have a 28 day compressive strength of 3000 psi. In the event that the casing is parted during removal, or if for any reason the casing cannot be recovered, the inside of the casing shall be filled with abandonment fluid as described above, the top 20 feet of the casing filled with concrete and the casing shall be cut off 3 feet below grade and covered with a concrete cap. In no case shall these injection wells be converted to producing water wells for any other purpose.

M. Duties of the Permittee

It is a duty of the permittee to:

1. Comply with all permit conditions;

2. Halt or reduce activity -- it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the permit conditions;

3. Take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit;

4. Furnish to the administrator within a reasonable time, any information which the administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit; and furnish to the administrator, upon request, copies of records required to be kept by this permit.

N. Financial Responsibility

The permittee is required to maintain financial responsibility and resources in form approved by the director, to close, plug and abandon the discharge operation in a manner prescribed by the director.

There are no financial assurances required by this permit.

O. Special Measures the Director Finds Necessary:

After the first three years of operation the environmental monitoring requirements of this permit shall be reevaluated to determine their effectiveness and the overall necessity of each of the requirements placed on the permit. At that time, Water Quality Division and the permittee shall jointly agree on improvements to the monitoring and compliance system.

P. Special Permit Conditions:

Pollution or waste which migrates into an aquifer containing a usable groundwater of the state is a violation of the permit.

Mechanical Integrity -- operations terminate immediately if mechanical integrity of well or system fails and/or a leak or unauthorized fluid movement occurs.

Q. Signatories Requirement

All reports required by this permit and other requested information shall be signed as follows:

For a corporation -- by a principal executive officer of at least the level of vice-president;

For a partnership or sole proprietorship -- by a general partner or the proprietor, respectively;

For a municipality, state, federal or other public agency -- by either a principal executive officer or ranking elected official; or

By a duly authorized representative for any of the above. A person is a duly authorized representative only if:

1. The authorization is made in writing by one of the described principals;

2. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and

3. The written authorization is submitted to the administrator.

If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the administrator prior to or together with any reports or information, to be signed by an authorized representative.

Any person signing a report or other requested information shall make the following certification:

> "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

R. Noncompliance

Any permit noncompliance constitutes a violation of the permit.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification or planned changes or anticipated noncompliance, does not stay any permit condition.

S. Permit Transfer

The owner/operator of record (permittee) is always responsible for permit compliance. A permit holder cannot transfer his permit without approval of the department director.

T. Responsibilities

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

U. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

V. Severability

The provisions of this permit are severable, and if any provision of the permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

/nc

From: Peter F. Moyer

EMERGENCY DETENTION BASIN SPECIFICATIONS

ASPENS I / ASPENS II

WATER AND SEWER DISTRICT

1) Liquid Capacity: 800,000 gallons (10,700 cubic feet)

2) Area: Approximately 1 acre

3) Average Liquid Depth: 2.5 feet (with 1 foot free-board)

4) Embankment Height: 3.5 feet

5) Liner: 30 mil. PVC

6) General Location: West of Main building, to be specified with a more detailed design

This facility will have the capacity to store 48 hours of the peak design flow (400,000 gpd) for emergency situations. The existing effluent pumps will be used to pump to the basin which will be emptied by a gravity drain to the plant headworks.

APPENDIX B