

#### **CONTACT INFORMATION**

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#### PRINTED: 01-07-2011

#### ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: PIGEON MINE

ALTERNATE NAMES:

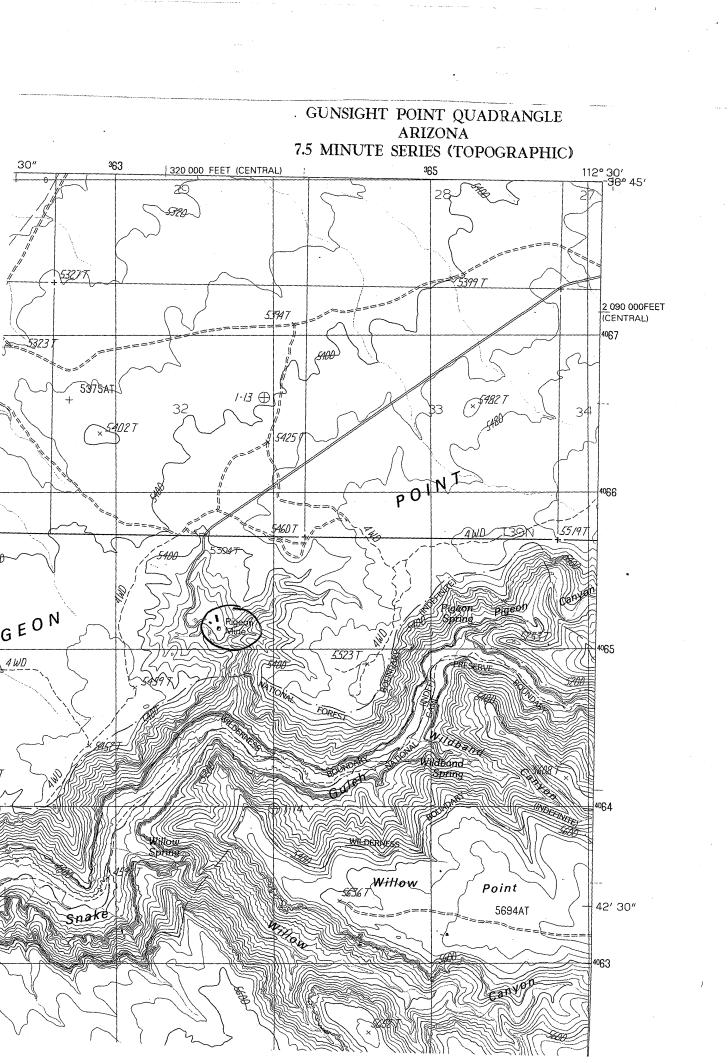
COCONINO COUNTY MILS NUMBER: 505

LOCATION: TOWNSHIP 38 N RANGE 2 W SECTION 5 QUARTER NE LATITUDE: N 36DEG 43MIN 26SEC LONGITUDE: W 112DEG 31MIN 39SEC TOPO MAP NAME: GUNSIGHT POINT - 7.5 MIN

**CURRENT STATUS: PAST PRODUCER** 

COMMODITY: URANIUM

BIBLIOGRAPHY:
ADMMR PIGEON MINE FILE
BILLLINGSLEY,G. ET AL USGS MF1627-A



PIGEON MINE (file)

Coconino Co.
T38N RZV, Sec 5 N/2

See: NUEXCO (Geology File) The Arizona Strip, March 1982 ECONOMIC GEOLOGY, VOL. 80, 1985, PP 1722-1735

Cownino County

## **ENERGY FUELS NUCLEAR INC.**

## **ENERGY FUELS NUCLEAR INC.**

# ENERGY FUELS NUCLEAR INC.

P.O. Box 36, Fredonia 86022 - Phone 643-7321	
Manager Mining Operations Roger Smith	
Pigeon T38N R2W Sec. 5 Employees 15 - Located 20 miles south of Fredonia - Underground uranium mine - Direct shipping ore - Mill in Blanding, Utah - Nearing ore depletion - Reclamation scheduled to begin during 1990.	
Mine Superintendent Robert Towner	

#### **ENERGY FUELS NUCLEAR INC.**

ENERGY FUELS NUCLEAR INC.
P.O. Box 36, Fredonia 86022 - Phone 643-7321
Manager Mining Operations Roger Smith
Pigeon  Employees 40 - Located 20 miles south of Fredonia - Underground uranium mine - Direct shipping ore - Mill in Blanding, Utah.
Mine Superintendent Dave Lipkowitz
Kanab North  Employees 35 - Located 25 miles southwest of Fredonia - Underground uranium mine - Direct shipping ore - Mill in Blanding, Utah.
Mine Superintendent Dan Thebeau

Hermit T38N R4W Sec. 17
Employees 32 - Located 30 miles southwest of Fredonia - Underground uranium mine - Under full time development - Production anticipated 1990.

Mine Superintendent ...... John Stubblefield

Pine Nut

Located 45 miles SW of Fredonia - Underground uranium mine - Developed - On Stand by.

Canyon T29N R3E Sec. 20
Located 45 miles north of Williams - Underground uranium mine - Under full time development.

PIGEON MINE

COCONINO COUNTY

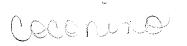
NJN WR 8/26/83: Lisa Bunting with Energy Fuels reported that their new Arizona address is P.O. Box 36, Fredonia, AZ 86022, Exploration Division, phone: (602) 643-5836, Mines Division phone (602) 643-5823. Currently the Pigeon, Cocomino County is under development and Kanab North, Mohave County is awaiting development while the environmental impact statement is being approved.

NJN WR 2/28/86: Wayne Seick reported that Energy Fuels is currently operating their mill at Blanding, Utah. They are trucking ore stockpiled at their Pigeon (f) and Hack Canyon Mines (f) at the rate of 1600 tons or 80 truck loads a day. They have sufficient ore to run the mill for one and a half years. Most of the yellow cake produced will go to their Swiss partners.

ABSTRACTED FROM ADMMR 1986 DIRECTORY OF ACTIVE MINES April 24, 1987

# **ENERGY FUELS NUCLEAR INC.**

P.O. Box 36, Fredonia 86022 - Phone 643-7321
Manager Mining Operations Roger Smith
Flagstaff Office - 500 Thompson, Flagstaff - Phone 774-0609
Area Manager Wayne Seick
Pigeon Mine Employees 40 - Located 20 miles south of Fredonia - Underground uranium mine - Direct shipping ore - Mill in Blanding, Utah.
Mine Superintendent





PIGEON # COCONINO

HYCK'S CANYON URANIUM PI MOLAUE

AMZONA ONE H MOLAUE

# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Fife Symington, Governor

Russell F. Rhoades, Director

# NOTICE OF THE PRELIMINARY DECISION TO ISSUE A PERMIT TRANSFER OF AN INDIVIDUAL AQUIFER PROTECTION PERMIT

Pursuant to Arizona Administrative Code, Title 18, Chapter 9, Article 1, the Director of the Arizona Department of Environmental Quality (ADEQ) intends to transfer the individual Aquifer Protection Permits (APP) issued to the following applicant:

Public Notice No. 1197APAZ

On or about March 7, 1997

Energy Fuels Nuclear, Inc. Three Park Central, Suite 900 1515 Arapahoe Street Denver, CO 80202

Aquifer Protection Permit Numbers: P-100519, P-101898, P-102018

Responsibilities will be transferred to the following:

International Uranium (USA) Corporation 950 Independence Plaza 1050 17<sup>th</sup> Street
Denver, CO 80202

Aquifer Protection Permit Numbers: P-100519, P-101898, P-102018

On or about March 31, 1997, all Hack Canyon, Pigeon, and Arizona 1 Mine assets of Energy Fuels Nuclear, Inc. (EFN), will be transferred to a new company named International Uranium [USA] Corporation (IUC). IUC will own and operate the Hack Canyon, Pigeon, and Arizona 1 mines pursuant to the conditions of the current APPs. Financial assurance for closure and post closure costs were approved by the Water Permits Section - Mining Unit (WPS-MU) of the Arizona Department of Environmental Quality (ADEQ) on February 19, 1997.

#### Hack Canyon Mine

The Hack Canyon Mine site is located approximately 30 miles southwest of the city of Fredonia in Coconino County, Arizona over groundwater of the Kanab Plateau

Groundwater Basin in Township 37 N, Range 5 W, Section 26, N½, Gila and Salt River Base Line and Meridian.

Latitude 36° 35' 3.9" North Longitude 112° 47' 50.9" West

The current permit authorizes clean closure of the Hack Canyon Mine, a former underground uranium mine. The site is classified as a clean closure pursuant to the APP. No mining operations are permitted at the mine site.

#### Pigeon Mine

The Pigeon Mine site is located approximately 15 miles south of the city of Fredonia in Coconino County, Arizona over groundwater of the Kanab Plateau Groundwater Basin in Township 38 N, Range 2 W, Section 5, SW¼ and N½, Gila and Salt River Base Line and Meridian.

Latitude 36° 43' 30" North Longitude 112° 31' 30" West

The current permit authorizes clean closure of the Pigeon Mine, a former underground uranium mine. The site is classified as a clean closure pursuant to the APP. No mining operations are permitted at the mine site.

#### Arizona 1 Mine

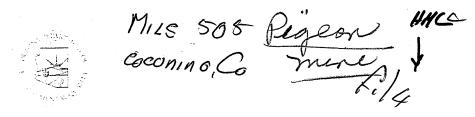
The Arizona 1 Mine site is located approximately 35 miles southwest of Fredonia, approximately 12 north of the Grand Canyon, 9 miles west of Kanab Canyon, Mohave County, Arizona over groundwater of the Kanab Plateau Groundwater Basin in Township 36 north, Range 5 west, Sections 22 & 23, Salt River Base Line and Meridian.

Latitude 36° 45' 05" North Longitude 112° 45' 03" West

The current permit authorizes IUC to operate the Arizona 1 Mine, an underground uranium mine. The site is classified as a temporary closure pursuant to the APP. No mining operations are permitted at the mine site.

The permits and related materials are available for public review Monday through Friday 8:00 a.m. to 5:00 p.m. at the Arizona Department of Environmental Quality, 3033 North Central Avenue, 4th Floor, Phoenix, Arizona 85012.

Persons may submit comments or request a public hearing on the proposed action, in writing, to Tony Bode, Arizona Department of Environmental Quality, 3033 North Central Avenue, Phoenix, Arizona 85012 within thirty (30) days from the date of this notice. Public hearing request must include the reason for such request.



# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Fife Symington, Governor

Edward Z. Fox, Director

# NOTICE OF THE PRELIMINARY DECISION TO ISSUE AN INDIVIDUAL AQUIFER PROTECTION PERMIT

Pursuant to Arizona Administrative Code, Title 18, Chapter 9, Article 1, the Director of the Arizona Department of Environmental Quality intends to issue an individual Aquifer Protection Permit to the following applicant(s) for the permanent closure of the Pigeon Mine:

Public Notice No. 32-95AZAP

On or about August 10, 1995

Pigeon Mine Site Energy Fuels Nuclear, Inc. Three Park Central, Suite 900 1515 Arapahoe Street Denver, CO 80202

Aquifer Protection Permit No. P-101898

The Pigeon Mine site is located in the southwest ¼ and north ½ of Section 5 of Township 38 N, Range 2 W, Salt River Baseline and Meridian in Coconino County, approximately 15 miles due south of the City of Fredonia, Arizona. The facility is located over groundwaters of the Kanab Plateau groundwater basin. The facility is currently inoperative and will be permanently closed under this Aquifer Protection Permit.

The Pigeon Mine operated as an underground uranium mine. Major components of the mining process at the facility included mining and stockpiling of ore, collection and evaporation of mine water from 2 lined containment ponds, and routine operational and maintenance activities associated with an operation of this nature. No ore processing occurred at the facility. All ore produced was transported to a mill in Blanding, Utah for processing.

Site construction commenced at the facility during March 1982 with mining operations concluded in January 1990. Site reclamation was completed in March 20, 1991. The mine produced approximately 195 tons of ore daily. Total ore recovered during operation was 439,000 tons.

A Notice of Disposal was filed with the Arizona Department of Environmental Quality on December 26, 1984. The facility obtained a NPDES Permit to provide for anticipated mine water discharge. Mining operation encountered limited connate water and this was collected and evaporated from a lined containment pond. No water was discharged under the NPDES permit.

The permit and related materials are available for public review Monday through Friday 8:00 a.m. to 5:00 p.m. at the Arizona Department of Environmental Quality, Aquifer Protection Program Section, 3033 N. Central Avenue, 4th Floor, Phoenix, AZ 85012, and at the Fredonia, Arizona, Public Library.

Persons may submit comments or request a public hearing on the proposed action, in writing, to Michael Wood, ADEQ, at 3033 N. Central Avenue, Phoenix, AZ 85012 within thirty (30) days from the date of this notice. Public hearing requests must include the reason for such request.

It is apparent from the above table, that within the last 7 years, exploration activities has resulted in approximately 648.6 acres of disturbance. However of this disturbance, approximately 533.5 acres have been reclaimed.

Even if reclamation were not a requirement, the total percent of surface disturbances compared to that in the resource area or the area of high mineral activities would be very small, generally far less than one tenth of a percent.

### Cummulative Surface Disturbance Resulting From Uranium Production

Since 1980, the following cumulative surface impacts from mining have resulted.

#### Hack's 1, 2 Hack's 3

9.1 acres disturbance 4.5 miles existing access upgraded

2.55 acres disturbance .77 miles additional access

Total 11.66 ac + 10 acres buffer zone = 22.0 acres Total 5.27 miles of access.

- original access was existing but upgraded to accomodate ore haulage
- 48 people are employed.
- EFN busses employees.
- All three mines are in the first phases of reclamation.
- Mt. Trumbull road is maintained by EFN and the county.
- 14.5 miles of powerline on public lands. This powerline will remain because of the Hermit and Pinenut Mine use.

#### Pigeon

- 40 acres (including 10 acre buffer zone).
- 10 miles of existing access upgraded to accomodate ore haulage plus 1/4 mile new access.
- 38 people are employed.
- EFN busses employees.
- Hauling is approximately 10-15 trips per day on Ryan
- Life expectancy is approximately 1990-1991, reclamation is scheduled immediately afterwards.
- 8.0 miles of powerline .

HACK

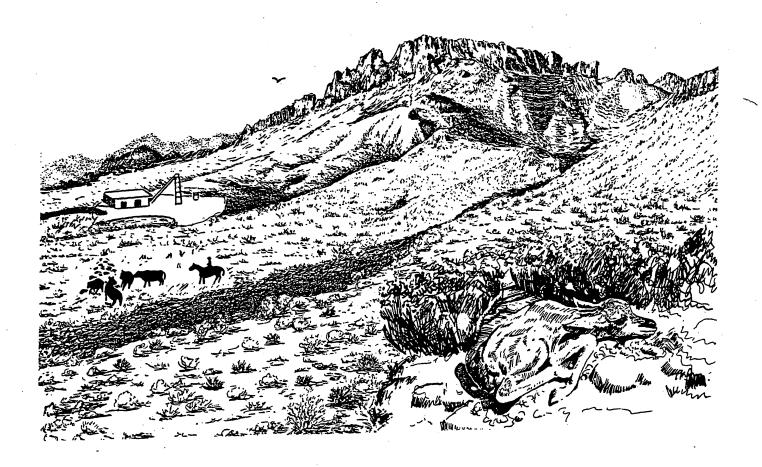
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AB) - P.45, P46

Hus m

# HERMIT (4)



source.

EA No. AZ-010-87-013

# THE HERMIT PROJECT DRAFT ENVIRONMENTAL ASSESSMENT

A Major Modification to the Hunt Project Plan of Operations for Uranium Ore Extraction





JOINT RE-NOTICE OF PROPOSED ACTION

by the

DEPT MUSE

U.S. Environmental Protection Agency, Region 9, (M-5) 215 Fremont Street San Francisco, CA 94105

415/974-7410

On Application(s) for National Pollutant Discharge Elimination System Permit(s) to Discharge Pollutants to Waters of the United States

State of Arizona

Department of Health Services

1740 West Adams Street

Phoenix, AZ 85007

602/255-1277

On Application(s) for Certification for Compliance with Applicable Effluent Limitations and Appropriate Requirements of State Law

On the basis of preliminary review of the requirements of the Clean Water Act (the Act), as amended, and implementing regulations, the Regional Administrator, Region 9, EPA, proposes to issue an NPDES permit(s) to the following applicant(s), subject to certain effluent limitations and special conditions:

Public Notice No. AZ-82-1-W

0 9 SEP 1982

Energy Fuels Nuclear, Inc. Suite 900, Three Park Central 1515 Arapahoe Denver, Colorado 80202

NPDES Permit No. AZ0022225

The applicant proposes to operate the Pigeon Mine located south of Fredonia in Coconino County, State of Arizona. The proposed discharge will consist of mine drainage water. The discharge at latitude 36°43'30"N, longitude 112°31'40"W will be to Snake Gulch, tributary to Kanab Creek. The protected uses of Kanab Creek are Aquatic Life and Wildlife, Partial Body Contact and Agriculture Livestock Watering. The United States Environmental Protection Agency has established effluent limitations for this industry. This permit, as proposed, will expire May 31, 1987.

A public notice for this proposal to issue a permit was originally issued on April 5, 1982. A public hearing was held in Fredonia on July 14, 1982. The purpose of this notice is to reopen the comment period for 30 days from the date of this notice. The EPA is particularly interested in comments, data or information pertaining to the following issues as they apply to this proposal to issue a permit:

- 1. How the permit can ensure compliance with Arizona Water Quality standards in the receiving stream.
- 2. The feasibility of total containment of mine drainage water.
- 3. The feasibility of restricting wastewater discharges to periods when there is flow in the receiving stream; the minimum receiving stream flow rate which should be required for discharges to be permitted.

The State is considering a request to certify the discharges described above, pursuant to Section 401 of the Act. The certification will set forth any limitations and monitoring requirements necessary to assure compliance with any applicable effluent limitations and other limitations, under Sections 301 and 302 of the Act; standard of performance under Section 306 of the Act; or prohibition, effluent standard, or pretreatment standard under Section 307 of the Act; and any other appropriate requirement of State law. No permit will be granted if certification is denied by the State.

The Administrative Record, which includes the application, draft permit conditions and other relevant documents, is available for public review Monday through Friday from 9:00 a.m. to 4:00 p.m. at the EPA address shown above.

A copy of the draft permit, and other pertinent documents, may be obtained by calling or writing to the NPDES Records Clerk at the Regional Office of EPA at the above address.

Persons wishing to comment upon or object to the proposed determinations or request a public hearing pursuant to 40 CFR 124.12 should submit their comments or request in writing within 30 days from the date of this notice, either in person or by mail to:

NPDES Records Clerk (M-5)
U.S. Environmental Protection Agency
Region 9
(at the address above)

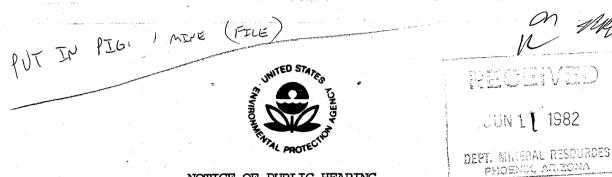
All comments or objections received within 30 days from the date of this notice will be considered in the formulation of the final determinations regarding the applications. If the response to this notice indicates a significant degree of public desire for a public hearing, the Regional Administrator shall hold one in accordance with 40 CFR 124.12.

If no public hearing is held, final determinations will be made shortly after the close of the comment period. The permit will become effective 30 days following the date when final determinations are signed.

A request for an evidentiary hearing may be submitted to the Regional Hearing Clerk within 30 days following the final determinations, in accordance with 40 CFR 124.74. If granted, applicable provisions of the permit will be stayed pending the results of the hearing.

Persons wishing to comment upon or object to certification by the State should submit their comments in writing within 30 days from the date of this notice, either in person or by mail to the State at the address given above.

Please bring the foregoing notice to the attention of all persons who you know would be interested in this matter.



#### NOTICE OF PUBLIC HEARING

# ENVIRONMENTAL PROTECTION AGENCY REGION 9

The Environmental Protection Agency, Region 9, (EPA) proposes to issue a National Pollutant Discharge Elimination System (NPDES) permit pursuant to Section 402 of the Clean Water Act (Pub. L. 92-500, as amended; 33 U.S.C. 1342) as described below. The Director, Water Management Division, EPA, to whom this determination has been delegated by the Regional Administrator, has found that a significant degree of public interest exists in the proposed permit.

The name of the applicant whose application will be considered at the hearing is:

ENERGY FUELS NUCLEAR, INC. Three Park Central, Suite 900 1515 Arapahoe Denver, CO 80202 NPDES Permit No. AZ0022225

The facility is located at: Pigeon Mine, in Section 5, Township 38 North, Range 2 West, Gila and Salt River Base and Meridian, in Coconino County, Arizona.

The business conducted at the facility is: Underground uranium mining.

The waterways to which the discharge will be made:

Snake Gulch, a tributary of Kanab Creek, a tributary of the Colorado River, latitude 36° 43' 30" North; longitude 112° 31' 40" West.

The classification of the receiving waters:

Primary Beneficial Uses: Aquatic life and wildlife, partial body contact, and agriculture livestock watering.

A copy of the draft permit, prepared pursuant to 40 Code of Federal Regulations, Section 124.6; a copy of the Fact Sheet, prepared pursuant to 40 Code of Federal Regulations, Section 124.8; and further information, may be requested from Environmental Protection Agency, Region 9, Grants and Permits Administration Branch, 215 Fremont Street, San Francisco, California 94105 (415/974-7410), or from the Bureau of Water Quality Control, Arizona Department of Health Services, 1740 West Adams Street, Phoenix, Arizona 85007 (602/255-1277) or forms and related documents may be inspected and copied there.

The discharge permit has been prepared in accordance with provisions of Sections 301, 302, 303, 304, 306, and 307 of the Clean Water Act, and to ensure compliance with water quality standards established by the State of Arizona. The permit will expire on May 31, 1987.

A public hearing will be held pursuant to 40 Code of Federal Regulations, Section 124.12, as follows:

DATE: Wednesday, July 14, 1982

TIME: 1:30 P.M. Session

7:30 P.M. Session

PLACE: Fredonia High School

Gymnasium

200 East Hortt Street Fredonia, Arizona

The purpose of the hearing is to furnish an opportunity for all interested persons to be present or represented and to express their views on the issuance or denial of the proposed permit. They may do so in writing, or may appear at the public hearing, or both.

Written comments should be submitted by July 26, 1982, either in person or by mail, to:

Environmental Protection Agency Hearing Clerk, Region 9 215 Fremont Street San Francisco, CA 94105 (415) 974-8036

The hearing may be continued from time to time or from place to place to suit the convenience of witnesses or the purpose of the hearing by announcement by the Hearing Officer at the scheduled hearing.

A review of the final permit may be had by submitting to the Regional Administrator, within ten days following such determination, a request for an evidentiary hearing as prescribed in Title 40, Code of Federal Regulations, Section 124.74.

Please bring this notice to the attention of all persons who would be interested in this matter.



## ARIZONA DEPARTMENT OF HEALTH SERVICES

Division of Environmental Health Services

BRUCE BABBITT, Governor JAMES E. SARN, M.D., M.P.H., Directo

#### JOINT NOTICE OF PROPOSED ACTION

by the

U.S. Environmental Protection Agency, Region IX [W-5-1] 215 Fremont Street San Francisco, CA 94105

415/974-8058

On Application(s) for National Pollutant Discharge Elimination System Permit(s) to Discharge Pollutants to Waters of the United States

State of Arizona Department of Health Services 1740 West Adams Street Phoenix, AZ 85007

602/255-1277

On Application(s) for Certification for Compliance with Applicable Effluent Limitations and Appropriate Requirements of State Law

On the basis of preliminary review of the requirements of the Clean Water Act (the Act), as amended, and implementing regulations, the Regional Administrator, Region IX, EPA, proposes to issue an NPDES permit(s) to the following applicant(s), subject to certain effluent limitations and special conditions:

Public Notice No. 7-82-AZ

April 5, 1982

Energy Fuels Nuclear, Inc. Suite 900, Three Park Central 1515 Arapahoe Denver, Colorado 80202

NPDES Permit No. AZ0022225

The applicant proposes to operate the Pigeon Mine located south of Fredonia in Coconino County, State of Arizona. The proposed discharge will consist of mine drainage water. The discharge at latitude 36° 43′ 30″ N, longitude 112° 31′ 40″ W will be to Snake Gulch, tributary to Kanab Creek. The protected uses of Kanab Creek are Aquatic Life and Wildlife, Partial Body Contact and Agriculture Livestock Watering. The United States Environmental Protection Agency has established effluent limitations for this industry. This permit, as proposed, will expire May 31, 1987.

The Department of Health Services is An Equal Opportunity Affirmative Action Employer. All qualified men and women, including the handicapped, are encouraged to participate.

State Health Building

1740 West Adams Street

Phoenix, Arizona 85007

The State is considering a request to certify the discharges described above, pursuant to Section 401 of the Act. The certification will set forth any limitations and monitoring requirements necessary to assure compliance with any applicable effluent limitations and other limitations, under Sections 301 and 302 of the Act; standard of performance under Section 306 of the Act; or prohibition, effluent standard, or pretreatment standard under Section 307 of the Act; and any other appropriate requirement of State law. No permit will be granted if certification is denied by the State.

The Administrative Record, which includes the application, draft permit conditions and other relevant documents, is available for public review Monday through Friday from 9:00 a.m. to 4:00 p.m. at the EPA address shown above.

A copy of the draft permit, and other pertinent documents, may be obtained by calling or writing to the NPDES Records Clerk at the Regional Office of EPA at the above address.

Persons wishing to comment upon or object to the proposed determinations or request a public hearing pursuant to 40 CFR 124.12 should submit their comments or request in writing, within 30 days from the date of this notice, either in person or by mail, to:

NPDES Records Clerk [E-4-1]
U. S. Environmental Protection Agency
Region IX, Enforcement Division
(at the address above)

All comments or objections received within 30 days from the date of this notice will be considered in the formulation of the final determinations regarding the applications. If the response to this notice indicates a significant degree of public desire for a public hearing, the Regional Administrator shall hold one in accordance with 40 CFR 124.12.

If no public hearing is held, final determinations will be made shortly after the close of the comment period. The permit will become effective 30 days following the date when final determinations are signed.

A request for an evidentiary hearing may be submitted to the Regional Hearing Clerk within 30 days following the final determinations, in accordance with 40 CFR 124.74. If granted, applicable provisions of the permit will be stayed pending the results of the hearing.

Persons wishing to comment upon or object to certification by the State should submit their comments in writing within 30 days from the date of this notice, either in person or by mail to the State at the address given above.

Please bring the foregoing notice to the attention of all persons who you know would be interested in this matter.