351 Hlm 02

AE-2A

(1)
(2) Mr. Edward E. Kennedy
Director of Environmental Affairs
United Nuclear-Homestake Partners
P.O. Box 98
Grants, New Mexico 87020
(3) NM 0020389
(4) Mr. Kennedy
(5) fact sheet.
(6) New Mexico Environmental Improvement Division

AE-4B-2

(1) NM0020389
(2) United nuclear - Homestake Partners
P.O. Box 98
Grants, New mexico 87020
(3) existing source facility
(4) Arroyo del Puerto to San mateo Creek
(5) recreation and support of desirable aquatic life presently common in New mexico water
(6) in the Ambrosia Lake mining area approximately 25 miles north of Grants, ~~Grants~~ New mexico
(7) fact sheet
(8) delete
(9) 1994
(10) the recovery by ion exchange of uranium from mine water
(11) ~~Effective July, 1984, limitations for total U are based on best available technology economically achievable (BAT) as determined by best professional judgment (BPJ).~~
(11) none

AE-4K

(1) NM0020389
(2) United nuclear - Homestake Partners
P.O. Box 98
Grants, New Mexico 87020

delete (proposed to operate)

(3) the United nuclear - Homestake Partners
uranium recovery plant
(4) McKinley
(5) New Mexico
(6) Arroyo del Puerto to San Mateo Creek
(7) delete in segment no. ( )
(8) in the Rio Grande Basin
(9) recreation and support of desirable aquatic life presently common in New Mexico waters
(10) General standards are found in section C, pages 2 through 5, of Water Quality Standards for Interstate and Intrastate Streams in New Mexico, as revised on March 14, 1978.

(11) outfall 001	0.54	1.01	N/A		
(12) outfall 001	66	48	68	N/A	

(13) 001

(14)

Total suspended solids	N/A	N/A
Chemical Oxygen Demand	N/A	N/A
Radium 226 (dissolved)	N/A	N/A
Total Radium 226	N/A	16 pCi/l
Total Uranium	N/A	N/A
Total Copper	N/A	N/A
Total Zinc	N/A	0.25

pCi/l

pH within the range of 7.3 to 8.6 standard units

(15) New mexico

delete (deny)

delete attached

(16) 001

(17) the effective date

(18) ~~July 1, 1984~~ the effiration of this permit

(19)

Total ~~suspended solids~~	20 mg/l	30 mg/l
Chemical ~~Oxygen~~ Demand	100 mg/l	200 mg/l
Radium 226 (dissolved)	3 pCi/l	10 pCi/l
Total Radium 226	10 pCi/l	30 pCi/l
Total Uranium	2.0 mg/l	4.0 mg/l
Total Zinc	0.5 mg/l	1.0 mg/l

pH within the range of
6.0 to 9.0 standard units

~~(16) 001~~

~~(17) July 1, 1984~~

~~(18) the effiration of this permit~~

~~(19)~~

~~Total Suspended Solids~~	~~15 mg/l~~	~~30 mg/l~~
~~Chemical Oxygen Demand~~	~~75 mg/l~~	~~150 mg/l~~
~~Radium 226 (dissolved)~~	~~3 pCi/l~~	~~10 pCi/l~~
~~Total Radium 226~~	~~10 pCi/l~~	~~30 pCi/l~~
~~Total Uranium~~	~~2.0 mg/l~~	~~4.0 mg/l~~
~~Total Copper~~	~~0.1 mg/l~~	~~0.2 mg/l~~
~~Total Zinc~~	~~0.4 mg/l~~	~~0.8 mg/l~~

~~pH within the range of~~
~~6.0 to 9.0 standard units~~

(F)

(20)

a. Consolidated NPDES application, Forms 1 and 2C, submitted by United Nuclear-Homestake Partners on December 22, 1980.

b. Ore Mining and Dressing Point Source Category, Subpart E guideline (Uranium, Radium and Vanadium Ores) 40 CFR, Part 440.52 (1) for best practicable control technology currently available (BPT) for pollutants discharged in mine drainage.

c. Water Quality Standards for Interstate and Intrastate Streams in New Mexico as amended on March 14, 1978.

d. Preliminary Contractors Draft Development Document for Proposed Effluent Limitation Guidelines for the Ore Mining and Dressing Point Source Category, dated April 11, 1980.

(21) outfall 001

Limitations from the effective date until June 30, 1984 are based on 40 CFR, Part 440.52(1), which is BPT for the Uranium, Radium and Vanadium Ore mining subcategory under the Ore mining and Dressing Point Source Category.

BPT (best practicable control technology currently available)

Limitations from July 1, 1984 to the expiration of the permit are based on best ~~[illegible]~~ engineering judgment as provided under section 402(a)(1) of the CWA. These limitations ~~involve the addition of secondary settling as defined in Table X-9 page 787 of the Preliminary Contractors Draft Development Document for the Ore mining and Dressing Point Source Category.~~ are based on maintaining BAT/BCT (best available technology economically achievable/best conventional pollutant control technology) identical with BPT.

(22) delete

Permit Rationale

Prepared by: Fred Humke

1. United nuclear – Homestead Partners
   Uranium recovery plant
   NPDES no. NM0020389

2. Permit being reissued for a five year term to address BAT as determined by BPJ.

(B)

3.

a. Consolidated NPDES application, Forms 1 and 2C, submitted by United Nuclear-Homestake Partners on December 22, 1980.

b. Ore mining and Dressing Point Source Category, Subpart E guidelines (Uranium, Radium and Vanadium Ores) 40 CFR, Part 440.52 (1) for best practicable control technology currently available (BPT) for pollutants discharged in mine drainage.

c. Water Quality Standards for Interstate and Intrastate Streams in New Mexico as amended on March 14, 1978.

d. Preliminary Contractor's Draft Development Document for Proposed Effluent Limitation Guidelines for the Ore Mining and Dressing Point Source Category, dated April 11, 1980.

4. Receiving stream: Arroyo del Puerto to San Mateo Creek in the Rio Grande Basin.

Effluent is not water quality limited.

~~5. Compliance schedule based on achieving BAT by July 1, 1984.~~

5. no compliance schedule is required since BAT/BCT is equivalent to BPT.

6.

outfall 001

Limitations from the effective date until June 30, 1984 are based on 40 CFR, Part 440.52(1), which is BPT for the Uranium, Radium and Vanadium ore mining subcategory under the Ore Mining and Dressing Point Source Category.

Limitations from July 1, 1984 to the expiration of the permit are based on best ~~[illegible]~~ engineering judgment as provided under Section 402(a)(1) of the CWA. These limitations ~~include the addition of secondary settling as defined in Table X-9, page 287 of the Preliminary Contractor's Draft Development Document for the Ore Mining and Dressing Point Source Category~~ are based on maintaining BAT/BCT identical with BPT.

Permit

(1) NM0020389
(2) NM0020389
(3) United nuclear - Homestake Partners
P.O. Box 98
Grants, New mexico 87020
(4) United nuclear - Homestake Partners uranium
recovery plant
McKinley County, New mexico
(5) Arroyo del Puerto to San mateo Creek
(6)
(7)
(8)
(9)
(10)
(11) the effective date
(12) ~~June 30, 1989~~ the expiration of this permit
(13) 001, mine water
(14) N/A
(15) N/A
(16) (0.6)
(17) (1.0)
(18) Temperature
(19) N/A
(20) N/A
(21) N/A
(22) * °F

(18) Total Suspended Solids
(19) N/A
(20) N/A
(21) 20 mg/l
(22) 30 mg/l
(18) Chemical Oxygen Demand
(19) N/A
(20) N/A
(21) 100 mg/l
(22) 200 mg/l
(18) Radium 226 (dissolved)
(19) N/A
(20) N/A
(21) 3 pCi/l
(22) 10 pCi/l
(18) Total Radium 226
(19) N/A
(20) N/A
(21) 10 pCi/l
(22) 30 pCi/l
~~(18) Total Copper~~
~~(19) N/A~~
~~(20) N/A~~
~~(21) X mg/l~~
~~(22) X mg/l~~

(18) Total Uranium
(19) N/A
(20) N/A
(21) 2.0 mg/l
(22) 4.0 mg/l
(18) Total zinc
(19) N/A
(20) N/A
(21) 0.5 mg/l
(22) 1.0 mg/l
(18) Total molybdenum
(19) N/A
(20) N/A
(21) * mg/l
(22) * mg/l
(18) Total Selenium
(19) N/A
(20) N/A
(21) * mg/l
(22) * mg/l
(18) Total Vanadium
(19) N/A
(20) N/A
(21) * mg/l
(22) * mg/l

(23) Continuous
(24) Record
(25) Temperature
(26) 1/week
(27) In situ
(25) Total suspended solids
(26) 1/week
(27) 24 hr. composite
(25) Chemical Oxygen Demand
(26) 1/week
(27) 24 hr. composite
(25) Radium 226 (dissolved)
(26) 1/week
(27) 24 hr. composite
(25) Total Radium 226
(26) 1/week
(27) 24 hr. composite
~~(25) Total Copper~~
~~(26) 1/week~~
~~(27) 24 hr. composite~~
(25) Total Uranium
(26) 1/week
(27) 24 hr. composite
(25) Total Zinc
(26) 1/week
(27) 24 hr. composite

(25) Total molybdenum
(26) ~~Week~~ 1/month
(27) 24 hr. composite
(25) Total selenium
(26) ~~Week~~ 1/month
(27) 24 hr. composite
(25) Total Vanadium
(26) ~~Week~~ 1/month
(27) 24 hr. composite
(28) Report
(29) delete

1 fee Part III, Paragraph 4.
(33) 6.0
(34) 9.0
(35) 1/week by grab sample
(36) At the outfall from the treatment plant

Latitude 35 deg 24 min 28 sec
Longitude 107 deg 50 min 25 sec

(40) none
(62) three
(63)

EPA and New Mexico Environmental Improvement Division