



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 6  
1445 ROSS AVENUE  
DALLAS, TEXAS 75202-2733

EXHIBIT  
FF  
Permit

JUL 17 2007

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (7004 1160 0003 0356 7715)

Mr. Edwin L. Wilmot, Manager  
National Nuclear Security Administrator  
Los Alamos Site Office  
Los Alamos, NM 87544

Re: NPDES Permit No. NM0028355  
Notice of Final Permit Decision

Dear Mr. Wilmot:

The permit recently issued to Los Alamos National Laboratory contains several typographical errors. Following regulations listed at 40CFR122.63(a), the following minor permit modifications are made:

- (1) Page 6 of Part I- The footnote (\*7) is corrected to be (\*6) for monitor of *Daphnia pulex*;
- (2) Page 11 of Part I- Total zinc is added into Footnote (\*3) for report; and
- (3) Page 21 of Part I- Delete monitoring requirement for total zinc.

Per your request, following regulations listed at 40CFR122.63(c), the following compliance reporting requirements are modified:

- (1) Part I.B.(2)(a)- Add option of end-of-pipe treatment to PCB's compliance schedule; and
- (2) Part I.B.(3)- Change progress report date from 15<sup>th</sup> to 28<sup>th</sup> so that the report may be submitted with DMRs.

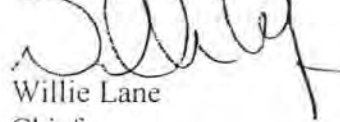
The following point source outfalls are deleted per your request, in accordance with regulations listed at 40CFR122.63(e)(2):

- (1) Outfall 03A158.

The revised Part I with adjusted page numbers and page 14 of Part II are enclosed.

If you have any questions on any aspect of this minor permit modification, please feel free to contact the permit writer, Isaac Chen, by telephone at:214-665-7364, FAX:214-665-2191, or E-mail: chen.isaac@epa.gov.

Sincerely yours,



Willie Lane  
Chief

Permits & Technical Section (6WQ-PP)

Enclosure(s)

cc w/Enclosure:

New Mexico Environment Department  
6EN-WC

PART I - REQUIREMENTS FOR NPDES PERMITS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

OUTFALL 001

Discharge Type: Continuous

Latitude 35°52'26"N, Longitude 106°19'09"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge Power Plant waste water from cooling towers, boiler blowdown drains, demineralizer backwash, R/O reject, floor and sink drains, and treated sanitary re-use to Sandia Canyon, in Segment Number 20.6.4.126 of the Rio Grande Basin.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>PARAMETERS/STORET CODES</u>	<u>DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS</u>			
	<u>QUANTITY/LOADING</u>		<u>QUALITY/CONCENTRATION</u>	
	<u>(LBS/DAY UNLESS STATED)</u>		<u>(mg/L UNLESS STATED)</u>	
	<u>MONTHLY AVG</u>	<u>DAILY MAX</u>	<u>MONTHLY AVG</u>	<u>DAILY MAX</u>
	<u>Report MGD</u>	<u>Report MGD</u>	<u>****</u>	<u>****</u>
Flow STORET: 50050				
TSS STORET: 00530	****	****	30	100
E. Coli (*1) STORET: 51040	****	****	Report	Report
E. Coli (*1) STORET: 51040	****	****	126 cfu/100 ml	410 cfu/100 ml
Total Residual Chlorine (*2) STORET: 50060	****	****	****	0.011
Total Aluminum (*3) STORET: 01105	****	****	Report	Report
Total Aluminum (*3) STORET: 01105	****	****	0.058	0.087
pH (Standard Units) (*4) STORET: 00400		Ranges from 6.0 to 9.0		
pH (Standard Units) (*4) STORET: 00400		Ranges from 6.6 to 8.8		
Temperature (*5) STORET: 00010	****	****	Report	Report
Temperature (*5) STORET: 00010	****	****	24°C	24°C

Total PCBs (*6) STORET: 39516	****	****	0.009 ug/l	0.014 ug/l
Total PCBs (*6) STORET: 39516	****	****	0.00064 ug/l(*7)0.00064 ug/l(*7)	

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	Continuous	Totalizer Record
TSS	1/Month	24-hr Composite
E. Coli	1/Week	Grab
Total Residual Chlorine	1/Week	Grab
Total Aluminum	1/Month	24-hr Composite
pH (Standard Units)	1/Week	Grab
Temperature	1/Week	Grab
Total PCBs	1/Year	24-hr Composite

WHOLE EFFLUENT TOXICITY TESTING

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS	
	QUALITY (PERCENT % UNLESS STATED)	
	MONTHLY AVG MINIMUM	7-DAY MINIMUM
Whole Effluent Toxicity Testing (*8) (7-Day Static Renewal)		
<u>Pimephales promelas</u>	Report	Report
<u>Ceriodaphnia dubia</u>	Report	Report

Species Quality Reporting Units: Pass = 0, Fail = 1

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Whole Effluent Toxicity Testing (7-Day Static Renewal)		
<u>Pimephales promelas</u>	1/Year	24-Hr. Composite
<u>Ceriodaphnia dubia</u>	1/Year	24-Hr. Composite

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### SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

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#### SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): following final treatment and prior to or at the point of discharge from Outfall 001 (Latitude 35°52'26"N, Longitude 106°19'09"W).

#### NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

#### FLOATING SOLIDS, OIL AND GREASE

There shall be no discharge of oils, scum, grease and other floating materials that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

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### FOOTNOTES

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- \*1 Logarithmic mean. Effluent limitations and monitoring requirements only apply when effluent from Outfall 13S is rerouted and discharged at Outfall 001. The discharge shall meet the *E. coli* effluent limitations within six (6) months from the effective date of the permit.
- \*2 Effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*3 During the period beginning the effective date of the permit and lasting through three (3) years from the effective date, the concentrations of total aluminum shall be reported in the DMRs. During the period beginning the three years from the effective date through the expiration date of the permit, the discharge must meet the effluent limitations.
- \*4 During the period beginning the effective date of the permit and lasting through six (6) months from the effective date, the pH shall meet the range of 6.0 to 9.0. During the period beginning the six months from the effective date through the expiration date of the permit, the discharge shall meet the pH range of 6.6 to 8.8.

- \*5 During the period beginning the effective date of the permit and lasting through three (3) years from the effective date, the Temperature shall be reported in the DMRs. During the period beginning the three years from the effective date through the expiration date of the permit, the discharge must meet the effluent limitations.
- \*6 EPA published Method 1668 Revision A shall be used for total PCBs analysis.
- \*7 See Part I.B.2. Compliance Schedule for PCBs.
- \*8 The WET test should occur between November 1 and March 31 when most sensitive juvenile life forms are likely to be present in the receiving water and colder ambient temperatures might adversely affected treatment processes. Critical dilution 100%, and the dilution series are 32%, 42%, 56%, 75%, 100%. See Part II, Section H. Whole Effluent Toxicity (7-Day Chronic Testing).

OUTFALL 13S

Discharge Type: Continuous  
 Latitude 35°51'08"N, Longitude 106°16'33"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge treated sanitary waste water to Sandia Canyon in Segment Numbers 20.6.4.126 via outfalls utilizing treated effluent as specified in Outfall 001 and Category 03A, or to Canada del Buey in Segment Numbers 20.6.128 of the Rio Grande Basin.

Such discharges shall be limited and monitored by the permittee as specified below:

CHEMICAL/PHYSICAL/BIOCHEMICAL

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS			
	QUANTITY/LOADING (LBS/DAY UNLESS STATED)		QUALITY/CONCENTRATION (mg/L UNLESS STATED)	
	MONTHLY AVG	DAILY MAX	MONTHLY AVG	DAILY MAX
	Report MGD	Report MGD	****	****
Flow				
STORET: 50050				
BOD5 (*1)	75	112	30	45
STORET: 00310				
BOD5 (*1)	80	119	30	45
STORET: 00310				
TSS (*1)	75	112	30	45
STORET: 00530				
TSS (*1)	80	119	30	45
STORET: 00530				
<i>E. Coli</i> (*2)	****	****	Report	Report
STORET: 51040				
<i>E. Coli</i> (*2)	****	****	548 cfu/100 ml	2507 cfu/100 ml
STORET: 51040				
Total Residual Chlorine (*3)	****	****	****	0.011
STORET: 50060				
pH (Standard Units)	Ranges from 6.0 to 9.0			
STORET: 00400				
Total PCBs (*4)	****	****	0.009 ug/l	0.014 ug/l
STORET: 39516				
Total PCBs (*4)	****	****	0.00064 ug/l(*5)	0.00064 ug/l(*5)
STORET: 39516				

<u>PARAMETERS/STORET CODES</u>	<u>MONITORING REQUIREMENTS</u>	
	<u>FREQUENCY OF ANALYSIS</u>	<u>SAMPLE TYPE</u>
Flow	Continuous	Totalizer Record
BOD5	1/Month	24-Hr Composite
TSS	1/Month	24-Hr Composite
<i>E. Coli</i> Bacteria	1/Month	Grab
Total Residual Chlorine	1/Week	Grab
pH (Standard Units)	1/Week	Grab
Total PCBs	1/Year	24-Hr Composite

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE MONITORING</u>	
	<u>30-Day Avg Min.</u>	<u>48-Hr. Min.</u>

Whole Effluent Toxicity Testing  
(48 Hr. Static Renewal)

Daphnia pulex

Report

Report

<u>EFFLUENT CHARACTERISTIC</u>	<u>MONITORING REQUIREMENTS</u>	
	<u>Frequency</u>	<u>Type</u>

Whole Effluent Toxicity Testing  
(48 Hr. Static Renewal)

Daphnia pulex

1/2 Years (\*6)

3-hr Composite

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at the Parshall Flume following the chlorine contact chamber (Latitude 35°51'08"N, Longitude 106°16'33"W) and prior to discharge to either Canada del Buey at Latitude 35°51'07"N, Longitude 106°16'27"W, or into the effluent reuse line to Sandia Canyon at Latitude 35°52'29"N, Longitude 106°18'38"W, or other outfalls utilizing treated effluent in the Outfall 001 and Category 03A.



NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

FLOATING SOLIDS, OIL AND GREASE

There shall be no discharge of oils, scum, grease and other floating materials that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

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FOOTNOTES

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- \*1 The monthly average and daily maximum loads of 75 and 112 lbs/day apply from the beginning the effective date of the permit and lasting until the average discharge rate has increased to 0.318 MGD through the addition of sanitary waste water from a residential subdivision located in Los Alamos County. LANL shall notify EPA Region 6 and NMED in writing two weeks prior to the addition of residential sanitary waste water to the TA-46 treatment plant. Mass loads of 80 and 119 lbs/day apply beginning the connection of sanitary waste water from a residential subdivision located in Los Alamos County lasting through the expiration date of the permit.
- \*2 Logarithmic mean. Effluent limitations and monitoring requirements only apply when discharge is made directly to Canada del Buey. The discharge shall meet the *E. coli* effluent limitations within six (6) months from the effective date of the permit. The discharge shall comply with the monitoring requirement and effluent limitations for *E. coli* if it discharges at other outfall.
- \*3 Effluent limitations and monitoring requirements only apply when discharge is made directly to Canada del Buey. The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*4 Effluent limitations and monitoring requirements only apply when discharge is made directly to Canada del Buey. EPA published Method 1668 Revision A shall be used. The permittee shall take efforts not to discharge PCBs contained effluent at Outfall 13S to Canada del Buey. PCBs contained effluent shall not be re-routed or reused, and/or discharged at other outfalls except Outfall 001. If the wastewater is discharge at other outfall, it shall comply with effluent limitations and monitoring requirements for PCBs.
- \*5 See Part I.B.2. Compliance Schedule for PCBs.
- \*6 When discharge is made directly to Canada del Buey. Take 1<sup>st</sup> sample in the 1<sup>st</sup> year of the permit and 2<sup>nd</sup> sample in the 3<sup>rd</sup> year of the permit. The WET test should occur between

November 1 and March 31. If discharges are not expected to occur during this sampling period, the test should be taken as soon as possible. Critical dilution 100%, and the dilution series are 32%, 42%, 56%, 75%, 100%. Also see Part II, Section I. Whole Effluent Toxicity (48-hour Acute Testing).

OUTFALL 051 - Radioactive Liquid Waste Treatment Facility (TA-50)

Discharge Type: Intermittent

Latitude 35°51'54"N, Longitude 106°17'52"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge treated radioactive liquid waste to Mortandad Canyon in segment number 20.6.4.128 of the Rio Grande Basin.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETERS/STORET CODES	DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS			
	QUANTITY/LOADING (LBS/DAY UNLESS STATED)		QUALITY/CONCENTRATION (mg/L UNLESS STATED)	
	MONTHLY AVG	DAILY MAX	MONTHLY AVG	DAILY MAX
Flow	Report	Report	****	****
STORET: 50050				
Chemical Oxygen Demand	****	****	125	125
STORET: 00340				
Total Suspended Solids	****	****	30	45
STORET: 00530				
Total Toxic Organics (*1)	****	****	1.0	1.0
STORET: 78141				
Ra 226+228	****	****	30 pCi/l	30 pCi/l
STORET: 11503				
Total Chromium	****	****	1.34	2.68
STORET: 01034				
Total Lead	****	****	0.423	0.524
STORET: 01051				
Total Cadmium (*2)	****	****	Report	Report
STORET: 01027				
Total Mercury (*2)	****	****	Report	Report
STORET: 71900				
Total Nickel (*2)	****	****	Report	Report
STORET: 01067				

Total Copper (*3) STORET: 01042	****	****	Report	Report
Total Copper (*3) STORET: 01042	****	****	0.14 ug/l	0.2 ug/l
Total Zinc (*3) STORET: 01092	****	****	Report	Report
Total Zinc (*3) STORET: 01092	****	****	2.2 ug/l	3.3 ug/l
Total Residual Chlorine (*4) STORET: 50060	****	****	****	0.011
Total Selenium STORET: 01147	****	****	Report	Report
Perchlorate STORET: 61209	****	****	Report	Report
pH (Standard Units) STORET: 00400	Ranges from 6.0 to 9.0			
Total PCBs STORET: 39516	****	****	Report	Report

PARAMETERS/STORET CODES

MONITORING REQUIREMENTS

	<u>FREQUENCY OF ANALYSIS</u>	<u>SAMPLE TYPE</u>
Flow	Continuous	Record
Chemical Oxygen Demand	1/Month	Grab
Total Suspended Solids	1/Month	Grab
Total Toxic Organics	1/Month	Grab
Tritium	1/Year	Grab
Ra 226+228	1/Year	Grab
Total Chromium	1/Year	Grab
Total Lead	1/Year	Grab
Total Cadmium	1/Year	Grab
Total Mercury	1/Year	Grab
Total Nickel	1/Year	Grab
Total Copper	1/Month	Grab
Total Zinc	1/Month	Grab
Total Residual Chlorine	1/Week	Grab
Total Selenium	1/Year	Grab
Perchlorate	1/Year	Grab
Total PCBs	1/Year	Grab
pH (Standard Units)	1/Week	Grab

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE MONITORING</u>	
	<u>30-Day Avg Min.</u>	<u>48-Hr. Min.</u>
Whole Effluent Toxicity Testing (48 Hr. Static Renewal)		
<u>Daphnia pulex</u>	Report	Report

<u>EFFLUENT CHARACTERISTIC</u>	<u>MONITORING REQUIREMENTS</u>	
	<u>Frequency</u>	<u>Type</u>
Whole Effluent Toxicity Testing (48 Hr. Static Renewal)		
<u>Daphnia pulex</u>	1/3 Months (*5)	3-hr Composite

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SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

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SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): following the final treatment and prior to or at the point of discharge from TA-50-1 treatment plant (approximately at Latitude 35°51'54"N, Longitude 106°17'52"W)

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

FLOATING SOLIDS, OIL AND GREASE

There shall be no discharge of oils, scum, grease and other floating materials that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

FLOW MEASUREMENTS

"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

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FOOTNOTES

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- \*1 The limits and monitoring for Total Toxic Organics do not include 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD), Pesticides, or Polychlorinated biphenyls
- \*2 Annual sample shall be taken for five (5) years until the expiration date.
- \*3 During the period beginning the effective date of the permit and lasting through three (3) years from the effective date, the concentration of total copper and total zinc shall be reported in the DMRs. During the period beginning the three years from the effective date through the expiration date of the permit, the discharge must meet the effluent limitations.
- \*4 The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*5 Sampling frequency 1/3 Months for the 1<sup>st</sup> year of the permit. If the test passes, reduce the frequency to 1/6 Months for year 2 through year 5 of the permit. If any test fails, return frequency to 1/3 Months for remainder of the permit. Critical dilution 100%, and the dilution series are 32%, 42%, 56%, 75%, 100%. Also, see Part II, Section I. Whole Effluent Toxicity (48-hour Acute Testing).

OUTFALL 05A055 - High Explosives Waste Water Treatment Plant (TA-16-1508)

Discharge Type: Intermittent

Latitude 35°50'49"N, Longitude 106°19'51"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge treated waste water from the high explosives waste water treatment facility to a tributary to Canon de Valle in segment number 20.6.4.128 of the Rio Grande Basin

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETERS/STORET CODES DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS

	QUANTITY/LOADING		QUALITY/CONCENTRATION	
	(LBS/DAY UNLESS STATED)		(mg/L UNLESS STATED)	
	MONTHLY AVG	DAILY MAX	MONTHLY AVG	DAILY MAX
Flow	Report MGD	Report MGD	****	****
STORET: 50050				
Chemical Oxygen Demand	****	****	125	125
STORET: 00340				
Total Suspended Solids	****	****	30	45
STORET: 00530				
Oil and Grease	****	****	15	15
STORET: 00556				
Total Toxic Organics (*1)	****	****	1.0	1.0
STORET: 78141				
Trinitrotoluene	****	****	0.02	Report
STORET: 81360				
Total RDX	****	****	0.20	0.66
STORET: 81364				
Perchlorate	****	****	Report	Report
STORET: 61209				
pH (Standard Units)	Ranges from 6.0 to 9.0			
STORET: 00400				

PARAMETERS/STORET CODES

MONITORING REQUIREMENTS

	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	1/Day	Estimate
Chemical Oxygen Demand	1/Quarter	Grab



Total Suspended Solids	1/Quarter	Grab
Oil and Grease	1/Quarter	Grab
Total Toxic Organics	1/Quarter	Grab
Trinitrotoluene	1/Quarter	Grab
Total RDX	2/Month (*2)	Grab
Perchlorate	1/Year	Grab
pH (Standard Units)	1/Week	Grab

EFFLUENT CHARACTERISTIC

DISCHARGE MONITORING

30-Day Avg Min.      48-Hr. Min.

Whole Effluent Toxicity Testing  
(48 Hr. Static Renewal)

Daphnia pulex

Report

Report

EFFLUENT CHARACTERISTIC

MONITORING REQUIREMENTS

Frequency

Type

Whole Effluent Toxicity Testing  
(48 Hr. Static Renewal)

Daphnia pulex

1/5 Years (\*3)

3-hr Composite

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): following final treatment and prior to or at the point of discharge (Latitude 35°50'49"N, Longitude 106°19'51"W).

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

FLOATING SOLIDS, OIL AND GREASE

There shall be no discharge of oils, scum, grease and other floating materials that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

FLOW MEASUREMENTS

"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

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FOOTNOTES

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- \*1 The limits and monitoring for Total Toxic Organics do not include 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD), Pesticides, or Polychlorinated biphenyls.
- \*2 One sample should be taken before the 15<sup>th</sup> of the month and another taken after the 15<sup>th</sup> of the month.
- \*3 The WET test should occur during the first period of November 1 to March 31 after the effective date of the permit. If no discharge occurs during this period, testing should be taken as soon as possible. Critical dilution 100%, and the dilution series are 32%, 42%, 56%, 75%, 100%. See Part II, Section I. Whole Effluent Toxicity (48-hour Acute Testing).



OUTFALLS 03A021, 03A022, and 03A181

Discharge Type: Intermittent

Outfall 03A021: Latitude 35°52'14"N, Longitude 106°19'11"W (TA3-29)

Outfall 03A022: Latitude 35°52'14"N, Longitude 106°19'01"W (TA3-2274)

Outfall 03A181: Latitude 35°51'50.8"N, Longitude 106°18'05"W (TA55-6)

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge cooling tower blowdown and other wastewater to Mortandad Canyon, in segment number 20.6.4.128 of the Rio Grande Basin.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETERS/STORET CODES DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS

	QUANTITY/LOADING		QUALITY/CONCENTRATION	
	(LBS/DAY UNLESS STATED)		(mg/L UNLESS STATED)	
	MONTHLY AVG	DAILY MAX	MONTHLY AVG	DAILY MAX
	Report MGD	Report MGD	****	****
Flow				
STORET: 50050				
Total Suspended Solids	****	****	30	100
STORET: 00530				
Total Residual Chlorine (*1)	****	****	****	0.011
STORET: 50060				
Total Phosphorus	****	****	20	40
STORET: 00665				
Total Copper (*2)	****	****	Report	Report
STORET: 01042				
Total Copper (*3)	****	****	0.019	0.028
STORET: 01042				
Total Selenium	****	****	Report	Report
STORET: 01147				
pH (Standard Units)	Ranges from 6.0 to 9.0			
STORET: 00400				

PARAMETERS/STORET CODES

MONITORING REQUIREMENTS

	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	1/Day	Estimate
Total Suspended Solids	1/Quarter	Grab
Total Residual Chlorine	1/Week	Grab
Total Phosphorus	1/Quarter	Grab
Total Copper (*4)	1/Month	Grab

Total Selenium	1/Year	Grab
pH (Standard Units)	1/Week	Grab

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SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

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SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): following final treatment and prior to or at the point of discharge.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

FLOATING SOLIDS, OIL AND GREASE

There shall be no discharge of oils, scum, grease and other floating materials that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

FLOW MEASUREMENTS

"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

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FOOTNOTES

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- \*1 The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*2 Apply to Outfall 03A022 only. Effective beginning the effective date and lasting until three (3) years after the effective date.
- \*3 Apply to Outfall 03A022 only. Effective beginning three (3) years after the effective date and lasting through the expiration date.
- \*4 Apply to Outfall 03A022 only.

OUTFALLS 03A027, 03A113, and 03A199

Discharge Type: Intermittent

03A027: Latitude 35°52'26"N, Longitude 106°19'08"W (TA3-285 & 2327)

Outfall 03A113: Latitude 35°52'03"N, Longitude 106°15'43"W  
(TA-53-293, 294, 952, 1032, & 1038)

Outfall 03A199: Latitude 35°52'33"N, Longitude 106°19'19"W (TA3-1837)

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge cooling tower blowdown and other wastewater to Sandia Canyon, in segment number 20.6.4.126 (from Outfall 03A027 and 199) and 20.6.4.128 (from Outfall 03A113) of the Rio Grande Basin.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETERS/STORET CODESDISCHARGE LIMITATIONS/REPORTING REQUIREMENTS

	QUANTITY/LOADING		QUALITY/CONCENTRATION	
	(LBS/DAY UNLESS STATED)		(mg/L UNLESS STATED)	
	MONTHLY AVG	DAILY MAX	MONTHLY AVG	DAILY MAX
Flow	Report MGD	Report MGD	****	****
STORET: 50050				
Total Suspended Solids	****	****	30	100
STORET: 00530				
E. Coli (*1)	****	****	Report	Report
STORET: 51040				
E. Coli (*1)	****	****	548 cfu/100 ml	2507 cfu/100 ml
STORET: 51040				
Total Residual Chlorine (*2)	****	****	****	0.011
STORET: 50060				
Total Phosphorus	****	****	20	40
STORET: 00665				
Total Copper (*3)	****	****	Report	Report
STORET: 01042				
pH (Standard Units)	Ranges from 6.0 to 9.0			
STORET: 00400				
pH (Standard Units) (*4)	Ranges from 6.6 to 8.8			
STORET: 00400				

PARAMETERS/STORET CODES

MONITORING REQUIREMENTS

	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	1/Day	Estimate

Total Suspended Solids	1/Quarter	Grab
E. Coli	1/Week	Grab
Total Residual Chlorine	1/Week	Grab
Total Phosphorous	1/Quarter	Grab
Total Copper (*3)	1/Year	Grab
pH (Standard Units)	1/Week	Grab

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SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

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SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): following final treatment and prior to or at the point of discharge.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

FLOATING SOLIDS, OIL AND GREASE

There shall be no discharge of oils, scum, grease and other floating materials that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

FLOW MEASUREMENTS

"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

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FOOTNOTES

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- \*1 Logarithmic mean. Effluent limitations and monitoring requirements only apply at Outfall 03A027 when effluent from Outfall 13S is rerouted and discharged at Outfall 03A027. (Effluent from Outfall 13S shall not be discharged at Outfall 03A027 if such effluent contains detectable PCBs.)  
The discharge shall meet the *E. coli* effluent limitations within six (6) months from the effective date of the permit.
- \*2 The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*3 Apply to Outfall 03A027 during the term of this permit period only.

- \*4 Apply at Putfalls 03A027 and 199. During the period beginning the effective date of the permit and lasting through six (6) months from the effective date, the pH shall meet the range of 6.0 to 9.0. During the period beginning the six months from the effective date through the expiration date of the permit, the discharge shall meet the pH range of 6.6 to 8.8.

OUTFALLS 03A130 and 03A185

Discharge Type: Intermittent

Outfall 03A130: Latitude 35°50'19"N, Longitude 106°19'33"W (TA11-30)

Outfall 03A185: Latitude 35°50'00"N, Longitude 106°18'40"W (TA15-625 & 626)

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge cooling tower blowdown and other wastewater to Water Canyon, in segment number 20.6.4.128 of the Rio Grande Basin.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETERS/STORET CODESDISCHARGE LIMITATIONS/REPORTING REQUIREMENTS

	QUANTITY/LOADING		QUALITY/CONCENTRATION	
	(LBS/DAY UNLESS STATED)		(mg/L UNLESS STATED)	
	MONTHLY AVG	DAILY MAX	MONTHLY AVG	DAILY MAX
Flow	Report MGD	Report MGD	****	****
STORET: 50050				
Total Suspended Solids	****	****	30	100
STORET: 00530				
Total Residual Chlorine (*1)	****	****	****	0.011
STORET: 50060				
Total Phosphorus	****	****	20	40
STORET: 00665				
Total Copper (*2)	****	****	Report	Report
STORET: 01042				
Total Copper (*3)	****	****	0.025	0.037
STORET: 01042				
Total Cyanide (*4)	****	****	Report	Report
STORET: 00720				
Total Cyanide (*5)	****	****	3.5 ug/l	5.2 ug/l
STORET: 00720				
Total Selenium	****	****	Report	Report
STORET: 01147				
pH (Standard Units)	Ranges from 6.0 to 9.0			
STORET: 00400				

<u>PARAMETERS/STORET CODES</u>	<u>MONITORING REQUIREMENTS</u>	
	<u>FREQUENCY OF ANALYSIS</u>	<u>SAMPLE TYPE</u>
Flow	1/Day	Estimate
Total Suspended Solids	1/Quarter	Grab
Total Residual Chlorine	1/Week	Grab
Total Phosphorous	1/Quarter	Grab
Total Copper	1/Month	Grab
Total Cyanide	1/Month	Grab
Total Selenium	1/Year	Grab
pH (Standard Units)	1/Week	Grab

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SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

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SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): following final treatment and prior to or at the point of discharge.

NO-DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

FLOATING SOLIDS, OIL AND GREASE

There shall be no discharge of oils, scum, grease and other floating materials that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

FLOW MEASUREMENTS

"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

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FOOTNOTES

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- \*1 The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*2 Effective beginning the effective date and lasting until three (3) years from the effective date these requirements apply at Outfall 03A130 only.



- \*3 Effective beginning three (3) years after the effective date and lasting through the expiration date these requirements apply at Outfall 03A130 only.
- \*4 Effective beginning the effective date and lasting until three (3) years from the effective date.
- \*5 Effective beginning three (3) years after the effective date and lasting through the expiration date.



OUTFALLS 03A048

Discharge Type: Intermittent

03A048: Latitude 35°52'11"N, Longitude 106°15'45"W (TA-53-964 & 979)

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge cooling tower blowdown and other wastewater to Los Alamos Canyon, in segment number 20.6.4.128 of the Rio Grande Basin.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETERS/STORET CODES DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS

	QUANTITY/LOADING		QUALITY/CONCENTRATION	
	(LBS/DAY UNLESS STATED)		(mg/L UNLESS STATED)	
	MONTHLY AVG	DAILY MAX	MONTHLY AVG	DAILY MAX
	Report MGD	Report MGD	****	****
Flow				
STORET: 50050				
Total Suspended Solids	****	****	30	100
STORET: 00530				
Total Residual Chlorine (*1)	****	****	****	0.011
STORET: 50060				
Total Phosphorus	****	****	20	40
STORET: 00665				
Total Arsenic (*2)	****	****	Report	Report
STORET: 01002				
Total Arsenic (*3)	****	****	0.01	0.014
STORET: 01002				
Total Copper (*4)	****	****	Report	Report
STORET: 01042				
Total Copper (*5)	****	****	0.021	0.031
STORET: 01042				
pH (Standard Units)	Ranges from 6.0 to 9.0			
STORET: 00400				

PARAMETERS/STORET CODES	MONITORING REQUIREMENTS	
	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	1/Day	Estimate
Total Suspended Solids	1/Quarter	Grab
Total Residual Chlorine	1/Week	Grab
Total Phosphorous	1/Quarter	Grab
Total Arsenic	1/Month	Grab
Total Copper	1/Month	Grab
Total Cyanide	1/Month	Grab
pH (Standard Units)	1/Week	Grab

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SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

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SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): following final treatment and prior to or at the point of discharge.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

FLOATING SOLIDS, OIL AND GREASE

There shall be no discharge of oils, scum, grease and other floating materials that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

FLOW MEASUREMENTS

"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

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FOOTNOTES

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- \*1 The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*2 Effective beginning the effective date and lasting until three (3) years from the effective date.

- \*3 Effective beginning three (3) years after the effective date and lasting through the expiration date.
- \*4 Effective beginning the effective date and lasting until three (3) years from the effective date.
- \*5 Effective beginning three (3) years after the effective date and lasting through the expiration.

OUTFALLS 03A160

Discharge Type: Intermittent

Outfall 03A160: Latitude 35°51'47"N, Longitude 106°17'49"W (TA35-124)

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge cooling tower blowdown and other wastewater to Ten Site Canyon, in segment number 20.6.4.128 of the Rio Grande Basin.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETERS/STORET CODES DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS

	QUANTITY/LOADING		QUALITY/CONCENTRATION	
	(LBS/DAY UNLESS STATED)		(mg/L UNLESS STATED)	
	MONTHLY AVG	DAILY MAX	MONTHLY AVG	DAILY MAX
Flow	Report MGD	Report MGD	****	****
STORET: 50050				
Total Suspended Solids	****	****	30	100
STORET: 00530				
Total Residual Chlorine (*1)	****	****	****	0.011
STORET: 50060				
Total Phosphorus	****	****	20	40
STORET: 00665				
Total Copper (*2)	****	****	Report	Report
STORET: 01042				
Total Copper (*3)	****	****	0.022	0.032
STORET: 01042				
pH (Standard Units)	Ranges from 6.0 to 9.0			
STORET: 00400				

PARAMETERS/STORET CODES

MONITORING REQUIREMENTS

	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	1/Day	Estimate
Total Suspended Solids	1/Quarter	Grab
Total Residual Chlorine	1/Week	Grab
Total Phosphorous	1/Quarter	Grab
Total Copper	1/Month	Grab
pH (Standard Units)	1/Week	Grab

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### SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

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#### SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): following final treatment and prior to or at the point of discharge.

#### NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

#### FLOATING SOLIDS, OIL AND GREASE

There shall be no discharge of oils, scum, grease and other floating materials that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

#### FLOW MEASUREMENTS

"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

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### FOOTNOTES

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- \*1 The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*2 Effective beginning the effective date and lasting until three (3) years from the effective date.
- \*3 Effective beginning three (3) years after the effective date and lasting through the expiration date.

OUTFALLS 03A021, 022, 048, 113, 130, 160, 181, and 185

Discharge Type: Intermittent

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge cooling tower blowdown and other wastewater to waters in segment number 20.6.4.128 of the Rio Grande Basin.

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE MONITORING</u>	
	<u>30-Day Avg Min.</u>	<u>48-Hr. Min.</u>
Whole Effluent Toxicity Testing (48 Hr. Static Renewal) (*1)		
<u>Daphnia pulex</u>	Report	Report

<u>EFFLUENT CHARACTERISTIC</u>	<u>MONITORING REQUIREMENTS</u>	
	<u>Frequency</u>	<u>Type</u>
Whole Effluent Toxicity Testing (48 Hr. Static Renewal)		
<u>Daphnia pulex</u>	1/5 Years	3-hr Composite

(\*1) The WET test should occur between November 1 and March 31 when most sensitive juvenile life forms are likely to be present in the receiving water and colder ambient temperatures might adversely affected treatment processes. If no discharge occurs or is expected during this period, the test shall occur as soon as possible.

Critical dilution of 100% (with a dilution series of 32%, 42%, 56%, 75%, and 100%) applies to Outfall(s) 03A021, 022, 048, 113, 130, 160, 181, and 185. Also see Part II. Section I. Whole Effluent Toxicity (48-Hr Acute Testing).

If the permittee certifies that discharges from the above outfalls have passed through similar operation and treatment and effluents are similar in nature, the testing result from one representative sample at Outfall 03A130 may be reported for all other outfalls. If Outfall 03A130 sample does not represent all 03A outfalls, the permittee may select additional representative outfalls for sampling.

OUTFALLS 03A027  
Discharge Type: Intermittent

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge cooling tower blowdown and other wastewater to waters in segment number 20.6.4.126 of the Rio Grande Basin.

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE MONITORING</u>	
	<u>30-Day Avg Min.</u>	<u>48-Hr. Min.</u>
Whole Effluent Toxicity Testing (48 Hr. Static Renewal) (*1)		
<u>Daphnia pulex</u>	Report	Report
<u>Pimephales promelas</u>	Report	Report

<u>EFFLUENT CHARACTERISTIC</u>	<u>MONITORING REQUIREMENTS</u>	
	<u>Frequency</u>	<u>Type</u>
Whole Effluent Toxicity Testing (48 Hr. Static Renewal)		
<u>Daphnia pulex</u>	1/5 Years	3-hr Composite
<u>Pimephales promelas</u>	1/5 Years	3-hr Composite

(\*1) Critical dilution of 80% (with a dilution series of 25%, 34%, 45%, 60%, and 80%) applies to Outfall 03A027. Also see Part II. Section I. Whole Effluent Toxicity (48-Hr Acute Testing).

The WET test should occur during the first period of November 1 to March 31 after the effective date of the permit. If no discharge occurs during this period, the test should occur as soon as possible.

OUTFALLS 03A199  
Discharge Type: Intermittent

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge cooling tower blowdown and other wastewater to waters in segment number 20.6.4.126 of the Rio Grande Basin.

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE MONITORING</u>	
	<u>30-Day Avg Min.</u>	<u>48-Hr. Min.</u>
Whole Effluent Toxicity Testing (7-Day Static Renewal) (*1)		
<u>Ceriodaphnia dubia</u>	Report	Report
<u>Pimephales promelas</u>	Report	Report

<u>EFFLUENT CHARACTERISTIC</u>	<u>MONITORING REQUIREMENTS</u>	
	<u>Frequency</u>	<u>Type</u>
Whole Effluent Toxicity Testing (7-Day Static Renewal)		
<u>Ceriodaphnia dubia</u>	1/5 Years	3-hr Composite
<u>Pimephales promelas</u>	1/5 Years	3-hr Composite

(\*1) Critical dilution of 35% (with a dilution series of 15%, 20%, 26%, 35%, and 47%) applies to Outfall 03A199. See Part II. Section H. Whole Effluent Toxicity (7-Day Chronic Testing).

The WET test shall occur during the first period of November 1 to March 31 after the effective date of the permit. If no discharge occurs during this period, the test should occur as soon as possible.



OUTFALL 02A129 (TA-21-357)

Discharge Type: Intermittent

Latitude 35°52'32"N, Longitude 106°16'31"W

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (unless otherwise noted),

the permittee is authorized to discharge boiler blowdown, water softener waste water, and once through cooling water to Los Alamos Canyon, in Segment Number 20.6.4.128 of the Rio Grande Basin.

Such discharges shall be limited and monitored by the permittee as specified below:

PARAMETERS/STORET CODES DISCHARGE LIMITATIONS/REPORTING REQUIREMENTS

	QUANTITY/LOADING		QUALITY/CONCENTRATION	
	(LBS/DAY UNLESS STATED)		(mg/L UNLESS STATED)	
	MONTHLY AVG	DAILY MAX	MONTHLY AVG	DAILY MAX
Flow (MGD)	Report	Report	****	****
STORET: 50050				
Total Suspended Solids	****	****	30	100
STORET: 00530				
Total Residual Chlorine (*1)	****	****	****	0.011
STORET: 50060				
Total Iron	****	****	10	40
STORET: 10145				
Total Phosphorus	****	****	20	40
STORET: 00665				
Sulfite (as SO <sub>3</sub> )	****	****	35	70
STORET: 00740				
Total Copper (*2)	****	****	Report	Report
STORET: 01042				
Total Copper (*2)	****	****	1.6 ug/l	2.4 ug/l
STORET: 01042				
pH (Standard Units)	Ranges from 6.0 to 9.0			
STORET: 00400				

PARAMETERS/STORET CODES

MONITORING REQUIREMENTS

	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	1/Day	Estimate
Total Suspended Solids	1/Quarter	Grab
Total Residual Chlorine	1/Week	Grab
Total Iron	1/Quarter	Grab

Total Phosphorous	1/Quarter	Grab
Sulfite (as SO <sub>3</sub> )	1/Quarter	Grab
Total Copper	1/Month	Grab
pH (Standard Units)	1/Week	Grab

EFFLUENT CHARACTERISTIC

DISCHARGE MONITORING

30-Day Avg Min.      48-Hr. Min.

Whole Effluent Toxicity Testing  
(48 Hr. Static Renewal)

Daphnia pulex

REPORT

REPORT

EFFLUENT CHARACTERISTIC

MONITORING REQUIREMENTS

Frequency

Type

Whole Effluent Toxicity Testing  
(48 Hr. Static Renewal)

Daphnia pulex

1/5 Years (\*3)

3-hr Composite

SAMPLING LOCATION(S) AND OTHER REQUIREMENTS

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Following final treatment and prior to or at the discharge point (Latitude 35°52'32"N, Longitude 106°16'31"W).

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box located in the upper right corner of the preprinted Discharge Monitoring Report.

FLOATING SOLIDS, OIL AND GREASE

There shall be no discharge of oils, scum, grease and other floating materials that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

FLOW MEASUREMENTS

"Estimate" flow measurements shall not be subject to the accuracy provisions established at Part III.C.6. The daily flow value may be estimated using best engineering judgment.

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FOOTNOTES

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- \*1 The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*2 During the period beginning the effective date of the permit and lasting through three (3) years from the effective date, the concentration of total copper shall be reported in the DMRs. During the period beginning the three years from the effective date through the expiration date of the permit, the discharge must meet the effluent limitations.
- \*3 The WET test shall occur during the first period of November 1 to March 31 after the effective date of the permit. If no discharge occurs during this period, the test should occur as soon as possible. Critical dilution 100%, and the dilution series are 32%, 42%, 56%, 75%, 100%. See Part II, Section I. for 48-hour Acute WET Testing.

B. SCHEDULE OF COMPLIANCE

1. The permittee shall comply with the following schedule of activities for the attainment of state water quality standards-based final effluent limitations for

Total Arsenic	Outfall 03A048
Total Aluminum	Outfall 001
Total Copper	Outfalls 02A129, 03A022, 03A048, 03A130, 03A158, 03A160, and 051
Total Zinc	Outfalls 051
Total Cyanide	Outfalls 03A130 and 03A185
Temperature	Outfall 001

- a. Determine exceedance cause(s) no later than twelve (12) months from the effective date of the permit;
- b. Develop control options no later than eighteen (18) months from the effective date of the permit; and
- c. Implement corrective action and attain final effluent limitations no later than three (3) years from the effective date of the permit.

2. The permittee shall use Method 1668A beginning the effective date of the permit and comply with the following schedule of activities for the attainment of state water quality standards-based final effluent limitations for PCBs:

- a. Identify all possible PCBs causes/sources or end-of-pipe treatment technologies no later than eighteen (18) months from the effective date of the permit;
- b. Develop the site specific MQL for PCBs for Method 1668A no later than twelve (12) months from the effective date of the permit;
- c. Submit a source/cause remediation plan or treatment plan to EPA R6 NPDES Programs Branch (6WQ-P) for approval and send a copy to NMED SWQB no later than twenty-four (24) months from the effective date of the permit;
- d. Start implementing corrective actions no later than six (6) months after EPA approves, in part or in whole, the source/cause remediation plan and schedules; and
- e. Complete corrective actions and comply with final effluent limitations per EPA approved schedule or one (1) day before the expiration date of the permit, whichever comes first.

3. The permittee shall submit quarterly progress reports in accordance with the following schedule. The requirement to submit quarterly progress reports shall expire when the discharge complies with final effluent limitations.

PROGRESS REPORT DATE

January 28, April 28, July 28, and October 28



A copy of the Final Report on Toxicity Reduction Evaluation Activities shall also be submitted to the state agency.

- e. Quarterly testing during the TRE is a minimum monitoring requirement. EPA recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. Failure to identify the specific chemical compound causing toxicity test failure will normally result in a permit limit for whole effluent toxicity limits per federal regulations at 40 CFR 122.44(d)(1)(v).

I. WHOLE EFFLUENT TOXICITY TESTING (48-HOUR ACUTE NOEC FRESHWATER)

I. SCOPE AND METHODOLOGY

- a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO FINAL OUTFALL(S): 13S, 051, 02A129, 05A055, 03A027, and 03A021, 022, 048, 113, 130, 160, 181 and 185.

REPORTED ON DMR AS FINAL OUTFALL: Same as above outfalls

CRITICAL DILUTION (%): Defined at PART I.

EFFLUENT DILUTION SERIES (%): Defined at PART I.

COMPOSITE SAMPLE TYPE: Defined at PART I

TEST SPECIES/METHODS: Defined at PART I / 40 CFR Part 136

Daphnia pulex acute static renewal 48-hour definitive toxicity test using EPA/600/4-90/027F, or the latest update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.

Pimephales promelas (Fathead minnow) acute static renewal 48-hour definitive toxicity test using EPA/600/4-90/027F, or the latest update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.