



**Region 6**  
**1201 Elm Street, Suite 500**  
**Dallas, Texas 75270-2102**

**NPDES Permit No. NM0028355**

## AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended,  
(33 U.S.C. 1251 et. seq; the "Act"),

Triad National Security, LLC  
Los Alamos National Laboratory  
PO Box 1663, K491  
Los Alamos, New Mexico 87544

AND

U.S. Department of Energy  
Los Alamos Area Office, A316  
3747 West Jemez Road  
Los Alamos, NM 87544

are authorized to discharge from a facility located at Los Alamos

to receiving waters named: Perennial portion of Sandia Canyon in Waterbody Segment No. 20.6.4.126, and Mortandad Canyon, Canada del Buey, Los Alamos Canyon, ephemeral portion of Sandia Canyon, Ten Site Canyon, and Canon de Valle, in Waterbody Segment No. 20.6.4.128 of the Rio Grande Basin,

in accordance with this cover page and the effluent limitations, monitoring requirements, and other conditions set forth in Parts I [Requirements for NPDES Permits], II [Other Conditions], III [Standard Conditions for NPDES Permits], and IV [Sewage Sludge Requirements] hereof.

This permit, Ruben Alayon-Gonzalez, Environmental Engineer, NPDES Permitting and Wetlands Section (6WD-PE), supersedes and replaces NPDES Permit No. NM0028355 issued March 30, 2022.

This permit shall become effective on November 1, 2023

This permit and the authorization to discharge shall expire at midnight, October 31, 2028

Issued on September 28, 2023

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Charles W. Maguire  
Director  
Water Division (6WD)

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PART I - REQUIREMENTS FOR NPDES PERMITSA. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOUTFALL 001

Discharge Type: Continuous

Latitude 35°52'26"N, Longitude 106°19'09"W (TA-3-22)

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, boiler blowdown, demineralizer backwash, RO reject and once through cooling water from the Power Plant; treated sanitary effluent from the Sanitary Wastewater System (SWWS) Facility; recycled sanitary effluent from the Sanitary Effluent Reclamation Facility (SERF), and treated cooling tower blowdown from the Strategic Computing Complex (SCC) to Sandia Canyon in Segment Number 20.6.4.126 of the Rio Grande Basin. The discharge from this outfall creates a perennial portion of Sandia Canyon that is effluent dominated. Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>CONCENTRATION</u>		<u>LOADING</u>		<u>FREQUENCY</u>	<u>SAMPLE TYPE</u>
	(mg/L, unless stated)		(Lbs/day, unless stated)			
	<u>MONTHLY</u>	<u>DAILY</u>	<u>MONTHLY</u>	<u>DAILY</u>		
	<u>AVERAGE</u>	<u>MAXIMUM</u>	<u>AVERAGE</u>	<u>MAXIMUM</u>		
Flow (MGD)	***	***	Report	Report	Continuous	Record
TSS	30	100	Report	Report	1/Month	24-hr Composite
BOD (*1)	30	45	73	109	1/Month	24-hr Composite
E. Coli (#/100 ml) (*2)	126	410	***	***	2/Month	Grab
Total Residual Chlorine	***	0.011 (*3)	***	***	1/Week	Grab
Total Recoverable Aluminum	Report	Report	***	***	1/Year	Grab
Total Copper	0.0087	0.0087	***	***	1/Year	Grab
Total Thallium	0.00047 (*4)	0.00047 (*4)	***	***	1/Year	Grab
Total Zinc	0.126 (*4)	0.126 (*4)	***	***	1/Year	Grab
6T3 Temperature (°C)	20°C (*4,*5)	***	***	***	1/Hour	Grab (or Continuous Record)
Total PCB (µg/l) (*6)	0.00064	0.00064	Report	Report	1/Year	24-hr Composite
pH (Standard Unit)	Range from 6.6 to 8.8		***	***	1/Week	Grab

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING	MONITORING REQUIREMENTS		SAMPLE TYPE
		MEASUREMENT FREQUENCY	DMR REPORTING FREQUENCY	
WHOLE EFFLUENT TOXICITY (*7) (7-day Chronic Static Renewal)	VALUE			
Ceriodaphnia dubia (Limit)	100%	1/6-Months	Monthly	24-Hr Composite
Pimephales promelas	Report	1/year	Quarterly	24-Hr Composite

### FOOTNOTES

- \*1 BOD monitoring is required when discharges of treated sanitary waste occur at Outfall 001.
- \*2 Geometric mean. Effluent limitations and monitoring requirements only apply when effluent from Outfall 13S is rerouted and discharged at Outfall 001.
- \*3 Effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*4 Effluent limitations take effective on the date of three years from the effective date of the permit.
- \*5 6T3 Temperature of 20°C (68°F) shall not be exceeded for six or more consecutive hours in a 24-hour period on more than three consecutive days. Compliance Schedule for temperature is given in the final permit as \*4.
- \*6 Samples shall be analyzed by an accredited lab for Total PCBs in accordance with EPA Method 1668C or later revisions. Method and analysis shall be sufficiently sensitive to evaluate the data against the New Mexico water quality standard (Total PCB < 0.00064 ug/L).
- \*7 Critical dilution 100%, and the dilution series are 32%, 42%, 56%, 75%, 100%. See Part II, Section G. Whole Effluent Toxicity (7-Day Chronic Testing). WET limit applies to Ceriodaphnia dubia. WET monitoring only applies to Pimephales promelas.

### 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.

### NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box in the Discharge Monitoring Report. Electronic DMR reporting will use the appropriate "No Discharge" or "NODI" codes such as NODI code C= No discharge.

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.

OUTFALL 13S

Discharge Type: Continuous  
 Latitude 35°51'08"N, Longitude 106°16'29"W (TA-46-347)

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 wastewater effluent from the Sanitary Wastewater System (SWWS) Facility to Canada del Buey in Segment Number 20.6.4.128 of the Rio Grande Basin. The discharge may also be routed to Outfall 001 in Sandia Canyon in Segment Number 20.6.4.126 of the Rio Grande Basin to support reuse/recycle.

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

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>CONCENTRATION</u>		<u>LOADING</u>		<u>FREQUENCY</u>	<u>SAMPLE TYPE</u>
	(mg/L, unless stated)		(Lbs/day, unless stated)			
	<u>MONTHLY</u>	<u>DAILY</u>	<u>MONTHLY</u>	<u>DAILY</u>		
	<u>AVERAGE</u>	<u>MAXIMUM</u>	<u>AVERAGE</u>	<u>MAXIMUM</u>		
Flow (MGD)	***	***	Report	Report	Continuous	Record
BOD	30	45	73	109	1/Month	24-hr Composite
TSS	30	45	73	109	1/Month	24-hr Composite
E. Coli (#/100 ml) (*1)	548	2507	***	***	2/Month	Grab
Total Residual Chlorine	***	0.011 (*2)	***	***	1/Week	Grab
Total PCB (µg/l) (*3)	0.00064	0.00064	Report	Report	1/Year	24-hr Composite
Total Thallium	0.00047 (*4)	0.00047 (*4)	***	***	1/Year	Grab
Adjusted Gross Alpha	Report	Report	***	***	1/Year	Grab
pH (Standard Unit)	Range from 6.0 to 9.0		***	***	1/Week	Grab

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING	MONITORING REQUIREMENTS	
WHOLE EFFLUENT TOXICITY TESTING (*5)	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
(48-hr Static Renewal) <u>Daphnia pulex</u>	Report	1/ 2-Years	24-Hr Composite

FOOTNOTES

- \*1 Geo. mean. If the wastewater is discharge at other outfall, it shall comply with effluent limitations and monitoring requirements for E. coli as established for Outfall 13S.
- \*2 The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*3 Samples shall be analyzed by an accredited lab for Total PCBs in accordance with EPA Method 1668C or later revisions. Method and analysis shall be sufficiently sensitive to evaluate the data against the New Mexico water quality standard (Total PCB < 0.00064 ug/L). If the wastewater is discharged directly to Outfall 001, as effluent from the SERF facility to Outfall 001, or as reused/recycled blowdown from the SCC Cooling towers to Outfall 001 or 03A027, it shall comply with effluent limitations and monitoring requirements for PCBs as established for Outfall 13S.
- \*4 Effluent limitations take effective on the date of three years from the effective date of the permit.
- \*5 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%.  
See Part II, Section H. Whole Effluent Toxicity (48-Hr Acute Testing).

SAMPLING LOCATION(S)

Samples taken in compliance with the monitoring requirements shall be taken at the following location(s): at the flow measuring device in Canada del Buey only when a discharge occurs at the outfall.

NO DISCHARGE REPORTING

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box in the Discharge Monitoring Report. Electronic DMR reporting will use the appropriate "No Discharge" or "NODI" codes such as NODI code C= No discharge.

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.



OUTFALL 051 - Radioactive Liquid Waste Treatment Facility

Discharge Type: Intermittent  
 Latitude 35°51'54"N, Longitude 106°17'52"W (TA-50-1)

During the period beginning the effective date of the permit and last through the expiration date of the permit (unless otherwise noted), the permittee is authorized to discharge treated effluent from the Radioactive Liquid Waste Treatment Facility (RLWTF) 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:

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>CONCENTRATION</u>		<u>LOADING</u>		<u>FREQUENCY</u>	<u>SAMPLE TYPE</u>
	<u>(mg/L, unless stated)</u>		<u>(Lbs/day, unless stated)</u>			
	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>		
Flow (MGD)	***	***	Report	Report	1/Day	Estimate (*4)
COD	125	125	***	***	1/Month	Grab
TSS	30	45	73	109	1/Month	Grab
Total Toxic Organics (*1)	1.0	1.0	***	***	1/Month	Grab
Ra 226+228 (pCi/l)	30	30	***	***	1/Week	Grab
Total Copper	0.0105	0.0105	***	***	3/Week	Grab
Total Hardness	Greater than or equal to 50 mg/l				3/Week	Grab
Total Residual Chlorine	***	0.011 (*2)	***	***	1/Week	Grab
Perchlorate	Report	Report	***	***	1/Week	Grab
Adjusted Gross Alpha	Report	Report	***	***	1/Year	Grab
Total Thallium	0.00047 (*5)	0.00047 (*5)	***	***	1/Year	Grab
pH (Standard Unit)	Range from 6.0 to 9.0		***	***	1/Week	Grab

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING	MONITORING REQUIREMENTS		
		MEASUREMENT FREQUENCY	DMR REPORTING FREQUENCY	SAMPLE TYPE
Whole Effluent Lethality (51711) (48-Hr Acute NOEC) (*3)	VALUE			
Daphnia pulex	100%	1/3 Months	Monthly	Grab

**FOOTNOTES**

- \*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 The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*3 Monitoring and reporting requirements begin on the effective date of this permit. 100% limitation became effective on March 1, 2016. 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 Limits).
- \*4 "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.
- \*5 Effluent limitations take effective on the date of three years from the effective date of the permit.

**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.

**NO DISCHARGE REPORTING**

If there is no discharge event at this outfall during the sampling month, place an "X" in the NO DISCHARGE box in the Discharge Monitoring Report. Electronic DMR reporting will use the appropriate "No Discharge" or "NODI" codes such as NODI code C= No discharge.

**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.

OUTFALL 05A055 - High Explosives Waste Water Treatment Plant

Discharge Type: Intermittent  
 Latitude 35°50'49"N, Longitude 106°19'51"W (TA-16-1508)

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:

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>CONCENTRATION</u>		<u>LOADING</u>		<u>FREQUENCY</u>	<u>SAMPLE TYPE</u>
	(mg/L, unless stated)		(Lbs/day, unless stated)			
	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>		
Flow (MGD)	***	***	Report	Report	1/Day	Estimate (*4)
COD	125	125	***	***	1/Quarter	Grab
TSS	30	45	***	***	1/Quarter	Grab
Total Toxic Organics (*1)	1.0	1.0	***	***	1/Quarter	Grab
Oil and Grease	15	15	***	***	1/Quarter	Grab
Trinitrotoluene	0.02	Report	***	***	1/Quarter	Grab
Total RDX	0.20	0.66	***	***	2/Month (*2)	Grab
Perchlorate	Report	Report	***	***	1/Year	Grab
Total Recoverable Aluminum	0.027 (*3)	0.027 (*3)	***	***	1/Week	Grab
Total Copper	0.0009 (*3)	0.0009 (*3)	***	***	1/Week	Grab
Total Lead	0.004 (*3)	0.004 (*3)	***	***	1/Week	Grab
Total Recoverable Selenium	0.005 (*3)	0.005 (*3)	***	***	1/Week	Grab
Total Zinc	0.013 (*3)	0.013 (*3)	***	***	1/Week	Grab
pH (Standard Unit)	Range from 6.0 to 9.0		***	***	1/Week	Grab

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING	MONITORING REQUIREMENTS	
WHOLE EFFLUENT TOXICITY TESTING (*5) (48-Hour Acute Static Renewal)	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Daphnia pulex	Report	1/5 Years	Grab

### FOOTNOTES

- \*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 effective date of the effluent limitations is three (3) years from the effective date of the final permit. Report only prior to the effective date.
- \*4 "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.
- \*5 The WET test should occur during the period of November 1 to March 31 after the effective date of the permit. If no discharge is expected 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 H. Whole Effluent Toxicity (48-Hour Acute Testing).

### 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 in the Discharge Monitoring Report. Electronic DMR reporting will use the appropriate "No Discharge" or "NODI" codes such as NODI code C= No discharge.

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.

OUTFALL 03A022

Discharge Type: Intermittent

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

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 storm water, roof drain water, and once-through cooling water for emergency use only to Mortandad Canyon, in segment number 20.6.4.128 of the Rio Grande Basin. (Cooling tower blowdown is not authorized for discharge at this outfall.)

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

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>CONCENTRATION</u>		<u>LOADING</u>		<u>FREQUENCY</u>	<u>SAMPLE TYPE</u>
	(mg/L, unless stated)		(Lbs/day, unless stated)			
	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>		
Flow (MGD)	***	***	Report	Report	1/Day	Estimate (*2)
TSS	30	100	***	***	1/Quarter	Grab
Total Residual Chlorine	***	0.011	***	***	1/Week (*1)	Grab
Total Copper	Report	Report	***	***	1/Year	Grab
Adjusted Gross Alpha	Report	Report	***	***	1/Year	Grab
Total Mercury	Report	Report	***	***	1/Year	Grab
Total PCB (µg/l) (*3)	0.00064	0.00064	Report	Report	1/Term	Grab
pH (Standard Unit)	Range from 6.0 to 9.0		***	***	1/Week	Grab

Footnote

- \*1 When discharge of once-through cooling water for emergency purposes only.
- \*2 "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.
- \*3 Monitor frequency once during the first year of coverage or when the facility next discharges if no discharge occurs during the first year. PCB data should be sent to EPA Permitting Section to evaluate if RP exists or not. If data from the confirmation sampling indicate that reasonable potential exists (RP = "Yes"), then DOE/Triad shall monitor for Total PCBs once per year at the outfall(s) for the remainder of the permit term. If data indicate "No" RP, then no additional

monitoring is required. Samples shall be analyzed by an accredited lab for Total PCBs in accordance with EPA Method 1668C or later revisions. Method and analysis shall be sufficiently sensitive to evaluate the data against the New Mexico water quality standard (Total PCB < 0.00064 ug/L).

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 in the Discharge Monitoring Report. Electronic DMR reporting will use the appropriate "No Discharge" or "NODI" codes such as NODI code C= No discharge.

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.

OUTFALL 03A181

Discharge Type: Intermittent  
 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 treated cooling tower blowdown to Mortandad Canyon, in Segment number 20.6.4.128.

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

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>CONCENTRATION</u>		<u>LOADING</u>		<u>FREQUENCY</u>	<u>SAMPLE TYPE</u>
	(mg/L, unless stated)		(Lbs/day, unless stated)			
	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>		
Flow (MGD)	***	***	Report	Report	1/Day	Estimate (*2)
TSS	30	100	***	***	1/Quarter	Grab
Total Phosphorus	20	40	***	***	1/Quarter	Grab
Total Residual Chlorine (*1)	***	0.011	***	***	1/Week	Grab
Total Copper	Report	Report	***	***	1/Year	Grab
Adjusted Gross Alpha	Report	Report	***	***	1/Year	Grab
Total PCB (µg/l) (*3)	0.00064	0.00064	Report	Report	1/Term	Grab
pH (Standard Unit)	Range from 6.0 to 9.0		***	***	1/Week	Grab

FOOTNOTES

- \*1 Effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes. TRC applies when discharges of cooling tower blowdown occur only.
- \*2 "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.
- \*3 Monitor frequency once during the first year of coverage or when the facility next discharges if no discharge occurs during the first year. PCB data should be sent to EPA Permitting Section to evaluate if RP exists or not. If data from the confirmation sampling indicate that reasonable potential exists (RP = "Yes"), then DOE/Triad shall monitor for Total PCBs once per year at the outfall(s) for



the remainder of the permit term. If data indicate “No” RP, then no additional monitoring is required. Samples shall be analyzed by an accredited lab for Total PCBs in accordance with EPA Method 1668C or later revisions. Method and analysis shall be sufficiently sensitive to evaluate the data against the New Mexico water quality standard (Total PCB < 0.00064 ug/L).

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 in the Discharge Monitoring Report. Electronic DMR reporting will use the appropriate “No Discharge” or “NODI” codes such as NODI code C= No discharge.

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.

OUTFALL 03A113

Discharge Type: Intermittent

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

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 stormwater to Sandia 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:

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>CONCENTRATION</u>		<u>LOADING</u>		<u>FREQUENCY</u>	<u>SAMPLE TYPE</u>
	(mg/L, unless stated)		(Lbs/day, unless stated)			
	<u>MONTHLY</u>	<u>DAILY</u>	<u>MONTHLY</u>	<u>DAILY</u>		
	<u>AVERAGE</u>	<u>MAXIMUM</u>	<u>AVERAGE</u>	<u>MAXIMUM</u>		
Flow (MGD)	***	***	Report	Report	1/Day	Estimate (*2)
TSS	30	100	***	***	1/Quarter	Grab
Total Residual Chlorine (*1)	***	0.011	***	***	1/Week	Grab
Total Phosphorus	20	40	***	***	1/Quarter	Grab
Total Recoverable Aluminum	Report	Report	***	***	1/Year	Grab
Total Mercury	Report	Report	***	***	1/Year	Grab
Adjusted Gross Alpha	Report	Report	***	***	1/Year	Grab
Total PCB (µg/l) (*3)	0.00064	0.00064	Report	Report	1/Term	Grab
Chromium VI	0.016	0.016	***	***	1/Term	Grab
pH (Standard Unit)	Range from 6.0 to 9.0		***	***	1/Week	Grab

FOOTNOTES

- \*1 Effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*2 "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.

- \*3 Monitor frequency once during the first year of coverage or when the facility next discharges if no discharge occurs during the first year. PCB data should be sent to EPA Permitting Section to evaluate if RP exists or not. If data from the confirmation sampling indicate that reasonable potential exists (RP = "Yes"), then DOE/Triad shall monitor for Total PCBs once per year at the outfall(s) for the remainder of the permit term. If data indicate "No" RP, then no additional monitoring is required. Samples shall be analyzed by an accredited lab for Total PCBs in accordance with EPA Method 1668C or later revisions. Method and analysis shall be sufficiently sensitive to evaluate the data against the New Mexico water quality standard (Total PCB < 0.00064 ug/L).

#### 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 in the Discharge Monitoring Report. Electronic DMR reporting will use the appropriate "No Discharge" or "NODI" codes such as NODI code C= No discharge.

#### 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.

OUTFALLS 03A027

Discharge Type: Intermittent

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

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 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: (Monitoring and reporting are not required if effluents are discharged via Outfall 001.)

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>CONCENTRATION</u>		<u>LOADING</u>		<u>FREQUENCY</u>	<u>SAMPLE TYPE</u>
	(mg/L, unless stated)		(Lbs/day, unless stated)			
	<u>MONTHLY</u>	<u>DAILY</u>	<u>MONTHLY</u>	<u>DAILY</u>		
	<u>AVERAGE</u>	<u>MAXIMUM</u>	<u>AVERAGE</u>	<u>MAXIMUM</u>		
Flow (MGD)	***	***	Report	Report	1/Day	Estimate (*5)
TSS	30	100	***	***	1/Quarter	Grab
Total Residual Chlorine (*1)	***	0.011	***	***	1/Week	Grab
Total Phosphorus	20	40	***	***	1/Quarter	Grab
E. Coli (#/100 ml) (*2)	548	2507	***	***	2/Month	Grab
Total PCB (µg/l) (*3)	0.00064	0.00064	Report	Report	1/Year	Grab
Total Copper (*4)	0.0087	0.0087	***	***	1/Year	Grab
Total Zinc (*4)	0.126	0.126	***	***	1/Year	Grab
Total Recoverable Aluminum	Report	Report	***	***	1/Year	Grab
Temperature (°C)	Report (*6)	Report (*6)	***	***	1/Quarter	Grab (or Continuous Record)
Dissolved pH (Standard Unit)	Range from 6.6 to 8.8		***	***	1/Week	Grab

FOOTNOTES

- \*1 Effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*2 Effluent limitations and monitoring requirements only apply when SWWS effluent treated at the SERF; used as makeup water in the SCC Cooling Towers; and discharged as blowdown to Outfall 03A027.
- \*3 Samples shall be analyzed by an accredited lab for Total PCBs in accordance with EPA Method 1668C or later revisions. Method and analysis shall be sufficiently sensitive to evaluate the data against the New Mexico water quality standard (Total PCB < 0.00064 ug/L).
- \*4 Effluent limitations take effective on the date of three years from the effective date of the permit.
- \*5 "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.
- \*6 Inst. Grab sample.

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 in the Discharge Monitoring Report. Electronic DMR reporting will use the appropriate "No Discharge" or "NODI" codes such as NODI code C= No discharge.

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.

OUTFALLS 03A048

Discharge Type: Intermittent

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

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>CONCENTRATION</u>		<u>LOADING</u>		<u>FREQUENCY</u>	<u>SAMPLE TYPE</u>
	(mg/L, unless stated)		(Lbs/day, unless stated)			
	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>		
Flow (MGD)	***	***	Report	Report	1/Day	Estimate (*2)
TSS	30	100	***	***	1/Quarter	Grab
Total Phosphorus	20	40	***	***	1/Quarter	Grab
Total Residual Chlorine (*1)	***	0.011	***	***	1/Week	Grab
Adjusted Gross Alpha	Report	Report	***	***	1/Year	Grab
Cyanide	Report	Report	***	***	1/Year	Grab
Total Mercury	Report	Report	***	***	1/Year	Grab
Total Selenium	Report	Report	***	***	1/Year	Grab
Total PCB (µg/l) (*3)	0.00064	0.00064	Report	Report	1/Term	Grab
Chromium VI	0.016	0.016	***	***	1/Term	Grab
pH (Standard Unit)	Range from 6.0 to 9.0		***	***	1/Week	Grab

FOOTNOTES

- \*1 Effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*2 "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.
- \*3 Monitor frequency once during the first year of coverage or when the facility next discharges if no discharge occurs during the first year. PCB data should be sent to EPA Permitting Section to evaluate if RP exists or not. If data from the confirmation sampling

indicate that reasonable potential exists (RP = "Yes"), then DOE/Triad shall monitor for Total PCBs once per year at the outfall(s) for the remainder of the permit term. If data indicate "No" RP, then no additional monitoring is required. Samples shall be analyzed by an accredited lab for Total PCBs in accordance with EPA Method 1668C or later revisions. Method and analysis shall be sufficiently sensitive to evaluate the data against the New Mexico water quality standard (Total PCB < 0.00064 ug/L).

#### 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 in the Discharge Monitoring Report. Electronic DMR reporting will use the appropriate "No Discharge" or "NODI" codes such as NODI code C= No discharge.

#### 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.

OUTFALL 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 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: (Monitoring and reporting are not required if effluents are conveyed to SWWS for treatment and discharge.)

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>CONCENTRATION</u>		<u>LOADING</u>		<u>FREQUENCY</u>	<u>SAMPLE TYPE</u>
	(mg/L, unless stated)		(Lbs/day, unless stated)			
	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>		
Flow (MGD)	***	***	Report	Report	1/Day	Estimate (*3)
TSS	30	100	***	***	1/Quarter	Grab
Total Phosphorus	20	40	***	***	1/Quarter	Grab
Total Residual Chlorine (*1)	***	0.011	***	***	1/Week	Grab
Adjusted Gross Alpha	Report	Report	***	***	1/Year	Grab
Total PCB (µg/l) (*4)	0.00064	0.00064	Report	Report	1/Term	Grab
Total Thallium	0.00047 (*5)	0.00047 (*5)	***	***	1/Year	Grab
pH (Standard Unit)	Range from 6.0 to 9.0		***	***	1/Week	Grab

FOOTNOTES

- \*1 Effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*2 Effluent limitations take effective on the date of three years from the effective date of the permit.
- \*3 "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.
- \*4 Monitor frequency once during the first year of coverage or when the facility next discharges if no discharge occurs during the first year. PCB data should be sent to EPA Permitting Section to evaluate if RP exists or not. If data from the



confirmation sampling indicate that reasonable potential exists (RP = "Yes"), then DOE/Triad shall monitor for Total PCBs once per year at the outfall(s) for the remainder of the permit term. If data indicate "No" RP, then no additional monitoring is required. Samples shall be analyzed by an accredited lab for Total PCBs in accordance with EPA Method 1668C or later revisions. Method and analysis shall be sufficiently sensitive to evaluate the data against the New Mexico water quality standard (Total PCB < 0.00064 ug/L).

\*5 Effluent limitations take effective on the date of three years from the effective date of the permit.

#### 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 Discharge Monitoring Report. Electronic DMR reporting will use the appropriate "No Discharge" or "NODI" codes such as NODI code C= No discharge.

#### 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.

OUTFALL 03A199

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 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>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>CONCENTRATION</u>		<u>LOADING</u>		<u>FREQUENCY</u>	<u>SAMPLE TYPE</u>
	(mg/L, unless stated)		(Lbs/day, unless stated)			
	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>		
Flow (MGD)	***	***	Report	Report	1/Day	Estimate (*3)
TSS	30	100	***	***	1/Quarter	Grab
Total Residual Chlorine (*1)	***	0.011	***	***	1/Week	Grab
Total Phosphorus	20	40	***	***	1/Quarter	Grab
Total Copper	Report	Report	***	***	1/Year	Grab
Total Recoverable Aluminum	Report	Report	***	***	1/Year	Grab
Total Thallium (*2)	0.00047	0.00047	***	***	1/Year	Grab
Temperature (°C)	Report (*4)	Report (*4)	***	***	1/Quarter	Grab
Total PCB (µg/l) (*5)	0.00064	0.00064	Report	Report	1/Term	Grab
pH (Standard Unit)	Range from 6.6 to 8.8		***	***	1/Week	Grab

FOOTNOTES

- \*1 Effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- \*2 Effluent limitations take effective on the date of three years from the effective date of the permit.
- \*3 "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.
- \*4 Inst. Grab Sample.

- \*5 Monitor frequency once during the first year of coverage or when the facility next discharges if no discharge occurs during the first year. PCB data should be sent to EPA Permitting Section to evaluate if RP exists or not. If data from the confirmation sampling indicate that reasonable potential exists (RP = "Yes"), then DOE/Triad shall monitor for Total PCBs once per year at the outfall(s) for the remainder of the permit term. If data indicate "No" RP, then no additional monitoring is required. Samples shall be analyzed by an accredited lab for Total PCBs in accordance with EPA Method 1668C or later revisions. Method and analysis shall be sufficiently sensitive to evaluate the data against the New Mexico water quality standard (Total PCB < 0.00064 ug/L).

#### 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 in the Discharge Monitoring Report. Electronic DMR reporting will use the appropriate "No Discharge" or "NODI" codes such as NODI code C= No discharge.

#### 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.

**B. COMPLIANCE SCHEDULES**

All effluent limitations with a compliance schedule established in Part I., section A. above, must comply with the following reporting requirements and compliance schedules:

1. Provide semi-annual progress reports by August 31 for the period of January – June, and by February 28 for the period of July – December;
2. Identify sources or causes of exceedance of permit limitations by six months from the effective date of the permit;
3. Identify corrective measures or study plan by one year from the effective date of the permit;
4. Comply with the final effluent limitations by the date specified in Part I. section A. of the permit.

**C. REPORTING OF MONITORING RESULTS**

Monitoring information shall be submitted as specified in Part III.D.4 of this permit and shall be submitted monthly.

1. Reporting periods shall end on the last day of the month.
2. The permittee is required to submit regular monthly reports as described above no later than the 28<sup>th</sup> day of the month following each reporting period.

The permittee shall report all overflows with the Discharge Monitoring Report submittal. These reports shall be summarized and reported in tabular format. The summaries shall include: the date, time, duration, location, estimated volume, and cause of the overflow; observed environmental impacts from the overflow; actions taken to address the overflow; and ultimate discharge location if not contained (e.g., storm sewer system, ditch, tributary). Any noncompliance which may endanger health or the environment shall be made to the EPA at the following e-mail address: R6\_NPDES\_Reporting@epa.gov, as soon as possible, but within 24-hours from the time the permittee becomes aware of the circumstance. This language supersedes that contained in Part III.D.7 of the Permit. Additionally, oral notification shall also be to the New Mexico Environment Department at (505) 827-0187 and Pueblo of San Ildefonso at (505) 455-4127 as soon as possible, but within 24 hours from the time the permittee becomes aware of the circumstance. A written report of overflows which endanger health or the

environment shall be provided to EPA and the New Mexico Environment Department, within 5 days of the time the permittee becomes aware of the circumstance.

D. APPLICATION

A complete copy of application with original officer signature for permit renewal shall be sent to EPA and either a paper copy or an electronic copy shall be sent to New Mexico Environment Department (NMED) at the mailing address listed in Part III of this permit.