

Replace PDF pages 324-329 of 652 of the NPDES application package with these pages.

NEW CHEMICAL ADDITIVES REQUEST FORM

Permittee Name:	Constellation Energy Generation LLC PA0009920		Facility Name:	e: CCEC	CCEC		
Permit No.:			Municipality:	Londonder	ry Twp		
Permit Effective Date:	Nov 1, 2007		County:	Dauphin Co	ounty		
Permit Expiration Date:	Administrative	ly extended					
Trade Name of Chemical	Additive:	PRE-TECT 2040H	IP .				
Manufacturer Name:	-	Nalco Company					
Intended Use(s):	-	Corrosion Inhibi	tor				
48-Hour LC ₅₀ or EC ₅₀ (for whole product):	-	694 mg/L					
Species Tested: Ce	eriodaphnia sp	. 🛭 Daphnia	sp. 🗆 Simocep	halus sp.			
List All Product Ingredie	nts:						
Constituent Name:			CAS #	Percent (%)	By Weight or Volume		
Methoxypropylamine			5332-73-0	45	By Weight		
			Total:	100			
Analytical Method(s) That be Used to Determine Ef Concentration:	fluent		•				
Method Detection Limit ((mg/L):						
certify under penalty of law that that that the qualified personnel gather an acse persons directly responsible and complete. I am aware that the nowing violations. See 18 Pa.	id evaluate the info e for gathering the i ere are significant	ormation submitted. Information, the info penalties for submi	Based on my inquiry of mation submitted is, to ting false information,	of the person or pe the best ofmy kn	rsons who manage the system owledge and belief, true, accur		
		Signatur	re of Principal Exe	cutive Officer of	or Dete		
Name/Title Principal Exe	ecutive Officer		Authorized Ac	gent -	Date		
Name/Title Principal Exe		_ Im		gent	January 15, 2025		



NEW CHEMICAL ADDITIVES REQUEST FORM

Indicate who is submitting	this form: 🛛 l	Permittee	Manufacturer			
Permittee Name:	Constellation Generation LL		Facility Name	e: CCEC		
Permit No.:	PA0009920	:::::::::::::::::::::::::::::::::::::::	— Municipality:		ry Twp	
Permit Effective Date:	Nov 1, 2007		County:	Dauphin Co	25000 12	
Permit Expiration Date:	Administrativ	ely extended	_			
Trade Name of Chemical	Additive:	PRE-TECT PT7	7000			
Manufacturer Name:		Nalco Compa	ny			
Intended Use(s):		Corrosion Inh	ibitor			
48-Hour LC ₅₀ or EC ₅₀ (for whole product):		250 mg/L	Mysid Shrimp (Mysid	opsis bahia)		
Species Tested: C	eriodaphnia sį	p. 🗌 Daphni	ia sp. 🔲 Simoceph	nalus sp.		
List All Product Ingredie	nts:					
Constituent Name:			CAS#	Percent (%)	By Weight or Volume	
Monoethanolamine			141-43-5	45	By Weight	
			Total:	100		
Analytical Method(s) The be Used to Determine Ef Concentration: Method Detection Limit (fluent	<u> </u>				
that qualified personnel gather a those persons directly responsi accurate and complete. I am imprisonment for knowing violation	nd evaluate the ir ble for gathering aware that there ons. See 18 Pa.	nformation submitt the information, are significant pe C.S. § 4904 (relati	ted. Based on my inquiry the information submitted enalties for submitting fal ing to unsworn falsification	of the person or p d is, to the best of lse information, in n).	with a system designed to assure ersons who manage the system or of my knowledge and belief, true, including the possibility of fine and	
Name/Title Principal Ex		ficer Signature of Principal Executive Officer or uthorized Agent				
			7			

3800-FM-BCW0486 Rev. 12/2019 pennsylvania DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF CLEAN WATER

Phone:	267-533-5559	Email:	Trevor.Orth@Constellation.com



NEW CHEMICAL ADDITIVES REQUEST FORM

Indicate who is submitting th	nis form: 🔀 Pe	rmittee [☐ Manufa	acturer			
	Constellation E	nergy					
Permittee Name:	Generation LLC	3	<u>.</u>	Facility N	lame:	CCEC	
Permit No.:	PA0009920	<u></u>	***	Municipa	lity:	Londonder	ry Twp
Permit Effective Date:	Nov 1, 2007			County:		Dauphin Co	ounty
Permit Expiration Date:	Administrative	ly extende	<u>d</u>				
Trade Name of Chemical	Additive:	Boric Acid	l (Borax De	ecahydrate)			
Manufacturer Name:		U.S. Borax	k Inc.				
Intended Use(s):		Pressurize	ed Water F	Reactor Trea	tment		
48-Hour LC ₅₀ or EC ₅₀ (for whole product):	-	5.7 mg/L	- EC10				
Species Tested: Ce	eriodaphnia sp	. 🛭 Dap	ohnia sp.	☐ Simoo	ephalu	s sp.	
List All Product Ingredie	nts:						
Constituent Name:			C	AS#	Pe	rcent (%)	By Weight or Volume
Sodium tetraborate decahyd	rate		130	3-96-4		100	>99.4
· 			Т	otal:		100	
Analytical Method(s) Tha be Used to Determine Eff Concentration:	fluent	A Method 6	6020B				
Method Detection Limit (mg/L):					,	
certify under penalty of law that that qualified personnel gather and those persons directly responsible and complete. I am aware that the knowing violations. See 18 Pa. C.	l evaluate the infor for gathering the ir ere are significant i	mation subn nformation, the penalties for	nitted. Base he informati submitting	ed on my inqu on submitted i false informati	iiry of the is, to the	person or per best of my kno	sons who manage the system or wledge and belief, true, accurate
Name/Title Principal Exe	ecutive Officer	Się	gnature o	f Principal I Authorized		ve Officer o	Date
Trevor L Orth / Plant	Manager		Trum	L. D	#		03/11/35
Phone: _267-533-5559		_ Ema	ail: <u>Trev</u>	or.Orth@Co	nstellat	ion.com	



NEW CHEMICAL ADDITIVES REQUEST FORM

Indicate who is submitting	this form: 🔀 Permittee	Manufacturer				
Permittee Name: Permit No.: Permit Effective Date: Permit Expiration Date:	Constellation Energy Generation LLC PA0009920 Nov 1, 2007 Administratively exter	Facility Nam Municipality: County:				
Trade Name of Chemical Manufacturer Name: Intended Use(s): 48-Hour LC ₅₀ or EC ₅₀ (for whole product): Species Tested: C List All Product Ingredien	NUKEM II pH contro 62.2 mg eriodaphnia sp.	sotopes GmbH ol g/L Zebrafish (Danio rer	Hydroxide Monohydrate (7LiOH*H2O) topes GmbH Zebrafish (Danio rerio) 96hr hnia sp. Simocephalus sp.			
Constituent Name:		CAS#	Percent (%)	By Weight or Volume		
Enriched lithium		76576-68-6				
Anhydrous lithium hydroxide	9	1310-65-2	>99			
		Total:	100			
Analytical Method(s) That May be Used to Determine Effluent Concentration: EPA Method 200.7 Method Detection Limit (mg/L): I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).						
Name/Title Principal Ex			gnature of Principal Executive Officer or Authorized Agent Date			
Trevor L Orth / Plant	Manager	Irum p. Cros		- 6/11/6		



Phone: 717-497-5357 Email: <u>Trevor.Orth@Constellation.com</u>



NEW CHEMICAL ADDITIVES REQUEST FORM

Indicate who is submitting this form: [⊠ Permittee ☐	Manufacturer						
Permittee Name: Constella Generati	ation Energy on LLC	Facility Na	me: CCEC					
Permit No.: PA00099	20	 Municipalit		rry Twp				
Permit Effective Date: Nov 1, 20	007	County:	Dauphin C					
Permit Expiration Date: Administ	ratively extended		<u></u>					
Trade Name of Chemical Additive	: Hydrazine 35	5%						
Manufacturer Name:	Arch Chemic	als Inc.						
Intended Use(s):	Corrosion in	Corrosion inhibator						
48-Hour LC ₅₀ or EC ₅₀								
(for whole product):	0.46 mg/L							
Species Tested: Ceriodaphr	nia sp. 🛭 Daphr	nia sp. 🔲 Simoce	phalus sp.					
List All Product Ingredients:								
Constituent Name:		CAS#	Percent (%)	By Weight or Volume				
Hydrazine, monohydrate		7803-57-8	55					
		-						
		··						
-		Total:	100					
Analytical Method(s) That May be Used to Determine Effluent Concentration:	EPA 8270							
Method Detection Limit (mg/L):								
I certify under penalty of law that this docume that qualified personnel gather and evaluate the those persons directly responsible for gathering and complete. I am aware that there are significations when we have the complete of the complete of the complete. See 18 Pa. C.S. § 4904 (responsible of the complete of the	ne information submitte g the information, the in ficant penalties for sub elating to unsworn fals	ed. Based on my inquiry information submitted is, pmitting false information	of the person or per to the best of my kno n, including the possil secutive Officer o	rsons who manage the system or owledge and belief, true, accurate bility of fine and imprisonment for				
Trevor L Orth / Plant Manager	` <i>\</i>	m L W	FT	03/11/25				
Phone: 267-533-5559	Email:	Trevor.Orth@Cons	stellation.com	· \				



NEW CHEMICAL ADDITIVES REQUEST FORM

ndicate who is submitting t	iis ioim. 🔼 P	erriillee 🔲 Mar	luracturer		
Daniel Manager	Constellation	0.	P - 1114 - N		
Permittee Name:	rmit No.: PA0009920		Facility Name		
			Municipality:	Londonde	· · · · · · · · · · · · · · · · · · ·
Permit Effective Date:	Nov 1, 2007	-1 - A 1 1	County:	Dauphin C	ounty
Permit Expiration Date:	Administrativ	ely extended			
Trade Name of Chemical	Additive:	Hydrazine 35%			
Manufacturer Name:					
ntended Use(s):		Corrosion inhiba	tor		
18-Hour LC ₅₀ or EC ₅₀					
for whole product):					
Species Tested: C	eriodaphnia sp	o. 🛭 Daphnia s	p. 🗌 Simoceph	alus sp.	
ist All Product Ingredie	nts:				
Constituent Name:			CAS#	Percent (%)	By Weight or Volume
lydrazine, monohydrate	·	-	7803-57-8	55	
			Total:	100	
Analytical Method(s) Tha be Used to Determine Eff Concentration:	luent	4 8270			
Method Detection Limit (mg/L) :0.0	1			
tertify under penalty of law that that qualified personnel gather and ose persons directly responsible domplete. I am aware that the owing violations. See 18 Pa. C. Name/Title Principal Exe	l evaluate the info for gathering the i ere are significant S. § 4904 (relating	rmation submitted. E nformation, the inforn penalties for submitti to unsworn falsificat	Based on my inquiry of nation submitted is, to fing ng false information, in	the person or per the best of my kno- cluding the possi-	rsons who manage the system of
Trevor L Orth / Plant		1	Authorized Age		03 11 25
TICVOLE OILLI / FIGHT	ivialiage!		LA UNIN		- 03/11/0
Phone: 267-533-5559		Email: Ti	revor.Orth@Conste	llation.com	



NEW CHEMICAL ADDITIVES REQUEST FORM

Indicate who is submitting t	his form: 🔀 P	ermittee	■ Manufa	acturer		
-	Constellation					
Permittee Name:	Generation LI	LC		Facility Nam	*	
Permit No.:	PA0009920			Municipality	: Londonder	rry Twp
Permit Effective Date:	Nov 1, 2007			County:	_ Dauphin C	ounty
Permit Expiration Date:	Administrativ	ely extende	ed			
Trade Name of Chemical	Additive:	TRASAR	TRAC103			
Manufacturer Name:		Nalco Co	mpany			
Intended Use(s):		Corrosio	n Inhibitor			
48-Hour LC ₅₀ or EC ₅₀						
(for whole product):		3,026 mg	g/L			
Species Tested: 🛛 C	eriodaphnia s _i	p. 🗌 Da	phnia sp.	☐ Simoceph	nalus sp.	
List All Product Ingredie	nts:					
Constituent Name:			C	AS#	Percent (%)	By Weight or Volume
Sodium Molybdate			763	1-95-0	35	by weight
-		-				
					 	
			T	otal:	100	
		ι		otai.	100	<u>. </u>
Analytical Method(s) Tha						
be Used to Determine Ef		Cl.	1 (16)	6		
Concentration:				, Spectrophoto	meter	
Method Detection Limit (mg/L): <u>IC-</u>	0.3 , Spect	trophotome	eter- 0.2		
certify under penalty of law that that qualified personnel gather and hose persons directly responsible and complete. I am aware that the knowing violations. See 18 Pa. C.	d evaluate the info for gathering the ere are significant	ormation sub information, penalties fo	mitted. Base the information r submitting f	ed on my inquiry o on submitted is, to false information, i	f the person or per the best of my kno	rsons who manage the system or owledge and belief, true, accurate
Name/Title Principal Exe	ecutive Officer	. S	ignature of	f Principal Exe Authorized Ag	cutive Officer o	Date
Trevor L Orth / Plant	Manager		Im	K. W	#	03/11/25
Phone: 267-533-5559		Em	nail: Treve	or.Orth@Const	ellation.com	1 1



NEW CHEMICAL ADDITIVES REQUEST FORM

Indicate who is submitting this form:	⊠ Permittee ☐ Mar	nufacturer				
Permittee Name:GenerationPermit No.:PA00099Permit Effective Date:Nov 1, 20	20	Facility Name: Municipality: County:	CCEC Londonder Dauphin Co			
Trade Name of Chemical Additive Manufacturer Name: Intended Use(s): 48-Hour LC ₅₀ or EC ₅₀ (for whole product): Species Tested:	Univar Water Treatment 100 mg/L (Ca	arassius auratus	-			
Constituent Name:		CAS# Pe	ercent (%)	By Weight or Volume		
Sulfuric acid, aluminum salt	10	043-01-3	29-50	by weight		
Water	7	732-18-5	Balance	by weight		
		Total:	100			
Analytical Method(s) That May be Used to Determine Effluent Concentration: EPA-NERL 375.2 Method Detection Limit (mg/L): 3-300 I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assurt that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, tru accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine are imprisonment for knowing violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification). Name/Title Principal Executive Officer Signature of Principal Executive Officer or Authorized Agent Trevor L Orth / Plant Manager						

3800-FM-BCW0486 Rev. 12/2019 pennsylvania DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF CLEAN WATER

Phone: 717-497-5357 Email: Trevor.Orth@Constellation.com



NEW CHEMICAL ADDITIVES REQUEST FORM

ndicate who is submitting to Permittee Name:	Constellation End Generation LLC		Facility Name	e: CCEC	
Permit No.:	PA0009920		Municipality:		rv Twp
Permit Effective Date:	Nov 1, 2007		County:	Dauphin Co	
Permit Expiration Date:	Administratively	extended		*	
Trade Name of Chemical	Additive:	CP 837 Chloride			
Manufacturer Name:		terling Water Tec	chnologies LLC		
Intended Use(s):		Corrosion Control	/ Biocide	2020	
48-Hour LC ₅₀ or EC ₅₀ (for whole product):).798 mg/L			
Species Tested: C	eriodaphnia sp.	□ Daphnia sp □ Daphnia sp	o. Simoceph	alus sp.	
Constituent Name:			CAS#	Percent (%)	By Weight or Volume
Zinc Chloride			546-85-7	10-20	
Orthophosphoric Acid		76	564-38-2	30-50	
Water		77	732-18-5	30-60	
			Total:	100	
Analytical Method(s) The be Used to Determine Ed Concentration: Method Detection Limit I certify under penalty of law that that qualified personnel gather and those persons directly responsible and complete. I am aware that the knowing violations. See 18 Pa. Concentration of the Name/Title Principal Expansion of the Use of the U	this document was per devaluate the informer for gathering the inference of \$2.5 \cdot \cd	nation submitted. Ba ormation, the informa enalties for submittin o unsworn falsification	ased on my inquiry o ation submitted is, to ng false information,	of the person or pe the best of my known including the possi cutive Officer of	rsons who manage the system or owledge and belief, true, accurate bility of fine and imprisonment for
Trevor L Orth / Plan	t Manager	Turn	L'. Uth	-	January 15, 2025
Phone: 267-533-5559		Email: _Tr	evor.Orth@Const	ellation.com	<u> </u>



NEW CHEMICAL ADDITIVES REQUEST FORM

Indicate who is submitting t	his form: 🛛 Peri	mittee 🔲 Manu	ıfacturer		
Permittee Name:	Constellation End Generation LLC	ergy	Facility Name	e: CCEC	
Permit No.:	PA0009920		Municipality:		rry Twp
Permit Effective Date:	Nov 1, 2007		County:	Dauphin Co	
Permit Expiration Date:	Administratively	extended	•		
Trade Name of Chemical	Additive: C	PTIMER 7139 PLU	JS		
Manufacturer Name:	N	lalco Company			
Intended Use(s):		Vater Treatment			<u>-</u>
48-Hour LC ₅₀ or EC ₅₀ (for whole product):	_	.20 mg/L			
(ioi mioio produot).		.zo mg/L			<u></u>
Species Tested:	eriodaphnia sp.	☑ Daphnia sp	. Simocepi	halus sp.	
List All Product Ingredie	nts:				
Constituent Name:			CAS #	Percent (%)	By Weight or Volume
Adipic Acid		12	24-04-9	1-5	by weight
			Total:	100	
Analytical Method(s) The be Used to Determine Education:					
Method Detection Limit	(mg/L):				
I certify under penalty of law that that qualified personnel gather ar those persons directly responsible and complete. I am aware that the knowing violations. See 18 Pa	nd evaluate the inform e for gathering the info ere are significant pe	nation submitted. Ba ormation, the informa analties for submittin	sed on my inquiry of ation submitted is, to g false information,	of the person or pe the best ofmy kn	ersons who manage the system or owledge and belief, true, accurate
Name/Title Principal Ex	ecutive Officer	Signature	of Principal Exe Authofized Ag		or Date
Trevor L Orth / Plan	t Manager	1/rem	. K- C	M	January 15, 2025
Phone: 267-533-5559		Email: Tre	evor.Orth@Conste	ellation.com	



NEW CHEMICAL ADDITIVES REQUEST FORM

Indicate who is submitting t	this form: 🛛 Permittee	□ Manufacturer		
Permittee Name:	Constellation Energy Generation LLC	Facility Na	me: CCEC	
Permit No.:	PA0009920	Municipalit		rry Twp
Permit Effective Date:	Nov 1, 2007	County:	Dauphin C	
Permit Expiration Date:	Administratively exten			ouncy
Trade Name of Chemical	Additive: Zinc Ac	etate Dihydrate		
Manufacturer Name:		Scientific		
Intended Use(s):		l boiler water treatment		
48-Hour LC ₅₀ or EC ₅₀	Interna	Toolier water treatment		**
(for whole product):	N/A mg	g/L		· · ·
Species Tested: C	eriodaphnia sp. 🔲 🏻	Daphnia sp. 🔲 Simoce	ephalus sp.	
List All Product Ingredie	nts:			
Constituent Name:		CAS #	Percent (%)	By Weight or Volume
Zinc Acetate Dihydrate Zn(C	H3CO2)2.2H2O	5970-45-6	~100	
	<u>.</u>			
		Total:	100	
Analytical Method(s) The be Used to Determine Eff				
Method Detection Limit	(mg/L):			
I certify under penalty of law that that qualified personnel gather an those persons directly responsible and complete. I am aware that th knowing violations. See 18 Pa.	nd evaluate the information s e for gathering the informatio ere are significant penalties	ubmitted. Based on my inquir n, the information submitted is for submitting false informatio	y of the person or pe	ersons who manage the system or owledge and belief, true, accurate
Name/Title Principal Ex	ecutive Officer	Signature of Principal Ex Authorized		or Date
Trevor L Orth / Plan	t Manager	1 mm h C	/W I	January 15, 2025
Phone: 267-533-5559	E	mail: Trevor.Orth@Con	stellation.com	

Please note that on or around 5 August 2025 Nalco sent the SDS for this chemical directly to Dr. Harmonie Hawley at PADEP. That SDS provided the complete composition and toxicity information.



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF CLEAN WATER

NEW CHEMICAL ADDITIVES REQUEST FORM

	Constellation Energy Generation LLC PA0009920		Facility Name	: CCEC	CCEC Londonderry Twp Dauphin County						
Permit No.:			Municipality: County:	Londonde							
Permit Effective Date: Nov 1, 200				Dauphin C							
Permit Expiration Date:	Administratively extended		_								
Trade Name of Chemical Additive: Manufacturer Name: Intended Use(s):		Nalcolyte 7134 Nalco Radwaste treatment; coagulant									
						l8-Hour LC ₅₀ or EC ₅₀ for whole product):					-
						Species Tested: 🔲 C	eriodaphnia s _i	p. 🛘 Daphnia s	sp. 🗆 Simocepi	nalus sp.	
ist All Product Ingredie	nts:										
Constituent Name:			CAS #	Percent (%)	By Weight or Volume						
					<u> </u>						
	-										
					<u> </u>						
			Total:	100							
Analytical Method(s) Tha be Used to Determine Ef Concentration:											
Method Detection Limit	(mg/L):										
ertify under penalty of law that at qualified personnel gather an ose persons directly responsible d complete. I am aware that th owing violations. See 18 Pa.	d evaluate the int forgathering the ere are significar	formation submitted. E einformation, the infor nt penalties for submitt	Based on my inquiry o mation submitted is, to ting false information, i	f the person or pe the best of my kn	ersons who manage the system owledge and belief, true, accum						
Name/Title Principal Ex	ecutive Office	r Signature	e of Principal Exe Authorized Ag		or Date						
	t Manager		- [//							