

Machine:	Actuator Va	alve			Plant:	Wastewater Treat	ment Plant
Area:	Filter Press	Building l	Updated:	7-9-10			
Personal	Protectiv	e Equipment:					
5	A		1000 - 10000 - 10000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 -	1000 1000			
Safety C	Glasses	Steel Toe Shoes	Leathei ne	Gloves (as eeded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>This machine only has one lock out point at breaker beside valve.</li> <li>This machine can be turned off by the cannibal system computer, but shall be locked out at breaker.</li> </ol>
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## LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

CALCULATION OF THE SECOND OF T		

ALL DUCK		AND MADE AND A REAL PROPERTY AND				
	Lock	Тад	Hasp			
Bef	fore Servicing	or Maintenance	e:			
1.	Notify affected p	personnel that you in	ntend to lockout or	5.	. Apply lock and tag on knife switch.	
	tagout the equip	oment.			*NOTE* Tag shall include date taken	out of service,
2.	Clear the area a	nd equipment of too	ols, parts and other		person/persons that took out of service	ce, and work being
	materials.				done.	
3.	Identify Actuato	r Valve knife switch	on power box			
	located along th	e north wall 3 feet f	rom the valve.			
4.	De-energize swi	tch by turning to OF	FF position.			

Energy Sources:	12				
Magnitude:	460V				
Energy Isolation Device	Control panel along north wall				
& Location:	by valve				
After Servicing or Maintenance:					

- Verify all controls are "off" or in neutral position. 1.
- 2. Clear machine or equipment of tools, parts, or people. Make sure all guarding is in place. 3.
- 4.
- Notify affected personnel that the machine or equipment will be reenergized. 5. Remove locks, devices, and tags from energy isolation devices.
- 6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Approvals:

Date:



Machine:	Blower 1				Plant:	Wastewater Treatr	nent Plant
Area:	Filter Press	Building	Updated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	A		4				
Safety C	Glasses	Steel Toe Shoes	Hearin (as	g Protection needed)	Lea	ther Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of</li> </ol>	
the equipment could cause bodily harm.	

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

Ω		

Lock

Hasp

Bef	ore Servicing or Maintenance:		
1.	Notify affected personnel that you intend to lockout or tagout the equipment.	5.	Apply lock and tag on knife switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Blower 1 knife switch on the southeast side of the Filter Press Building on the right side of the control panel.		
4.	De-energize knife switch by turning to OFF position.		

Energy Sources:	11			
Magnitude:	460V			
Energy Isolation Device	Control Panel in Filter Press			
& Location:	Building			
After Servicing or Maintenance:				

- Verify all controls are "off" or in neutral position. 1.
- 2. Clear machine or equipment of tools, parts, or people.
- Make sure all guarding is in place. 3.
- 4. Notify affected personnel that the machine or equipment will be reenergized.
- 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10



Machine:	Blower 2				Plant:	Wastewater Treat	ment Plant
Area:	Filter Press	Building	Updated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	A		(			5N30 -4- -4-	
Safety C	Glasses	Steel Toe Shoes	Hearin (as	g Protection needed)	Lea	ther Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

Ω		

Lock

Hasp

Bef	ore Servicing or Maintenance:		
1.	Notify affected personnel that you intend to lockout or tagout the equipment.	5.	Apply lock and tag on knife switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Blower 2 knife switch on the southeast side of the Filter Press Building on the right side of the control panel.		
4.	De-energize knife switch by turning to OFF position.		

Energy Sources:	11				
Magnitude:	460V				
Energy Isolation Device	Control Panel in Filter Press				
& Location:	Building				
After Servicing or Maintenance:					

#### After Servicing or Maintenance

- 1. Verify all controls are "off" or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- Notify affected personnel that the machine or equipment will be reenergized.
   Demons leave devices and there from an inclusion in the second se
- 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10

Approvals:

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Machine:	Blower 3				Plant:	Wastewater Treati	ment Plant
Area:	Filter Press	Building l	Jpdated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	A					4	
Safety C	Glasses	Steel Toe Shoes	Hearin (as	g Protection needed)	Lea	ther Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

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#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

Ω		

Lock

Hasp

Bef	ore Servicing or Maintenance:		
1.	Notify affected personnel that you intend to lockout or tagout the equipment.	5.	Apply lock and tag on knife switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Blower 3 knife switch on the southeast side of the Filter Press Building on the right side of the control panel.		
4.	De-energize knife switch by turning to OFF position.		

Energy Sources:	11				
Magnitude:	460V				
Energy Isolation Device	Control Panel in Filter Press				
& Location:	Building				
After Servicing or Maintenance					

#### waintenance

- Verify all controls are "off" or in neutral position. 1.
- 2. Clear machine or equipment of tools, parts, or people.
- Make sure all guarding is in place. 3.
- 4. Notify affected personnel that the machine or equipment will be reenergized.
- 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10

Machine:	Clarifier 1		Plant	: Wastewater Treatment Plant
Area:	North West		Updated: <u>7/9/10</u>	
Personal	Protectiv	e Equipment:		
5	D		anso cana	
Safety C	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1. Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	
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## LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	Concession of the second secon			
Lock	Tag	Hasp		

Bef	Before Servicing or Maintenance:						
1.	Notify all affected personnel that you intend to lockout the equipment.	5.	Apply hasp, lock, and tag on knife switch. *NOTE* Tag shall include date taken out of service,				
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.				
3.	Identify Clarifier 1 knife switch on the north side of the Sludge Handling Building on the top left of the control panel.	6.	Dissipate or release any stored energy by trying to turn knife switch ON at box located above the motor at the end of walkway of Clarifier 1.				
4.	Denergize knife switch by pulling to OFF position.	7.	Return knife switch to OFF position.				

Energy Sources:	11				
Magnitude:	460V				
Energy Isolation Device & Location:	Control Panel in Sludge Handling Building				
<ol> <li>After Servicing or M</li> <li>Verify all controls are "</li> <li>Clear machine or equip</li> <li>Make sure all guarding</li> <li>Notify affected personr re-energized.</li> <li>Remove locks, devices</li> <li>Re-energize or power-u devices to normal oper</li> </ol>	laintenance: off" or in neutral position. ment of tools, parts, or people is in place. lel that the machine or equipm and tags from energy isolation up machine by returning energ ating position.	e. nent will be on devices. gy isolating	Prepared by: Approvals:	  	7/9/10

Machine: Area:	Clarifier 2 North West		Plant: Updated:7/9/10	Wastewater Treatment Plant
Personal	Protectiv	e Equipment:		
5	D		5×35) -4-	
Safety 0	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1. Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	
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#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	Percent Per			
Lock	Tag	Hasp		

Bef	ore Servicing or Maintenance:		
1.	Notify all affected personnel that you intend to lockout the equipment.	5.	Apply hasp, lock, and tag on knife switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Clarifier 2 knife switch on the north side of the Sludge Handling Building on the top left of the control panel.	6.	Dissipate or release any stored energy by trying to turn knife switch ON at box located above the motor at the end of walkway of Clarifier 2.
4.	Denergize knife switch by pulling to OFF position.	7.	Return knife switch to OFF position.

Energy Sources:	11					
Magnitude:	460V					
Energy Isolation Device & Location:	Control Panel in Sludge Handling Building					
<ol> <li>After Servicing or M</li> <li>Verify all controls are "</li> <li>Clear machine or equip</li> <li>Make sure all guarding</li> <li>Notify affected personr re-energized.</li> <li>Remove locks, devices</li> <li>Re-energize or power-u devices to normal oper</li> </ol>	laintenance: off" or in neutral position. ment of tools, parts, or people is in place. That the machine or equipm and tags from energy isolatio up machine by returning energ ating position.	e. hent will be on devices. gy isolating	Prepared by Approvals	 	Date: - -	7/9/10

Machine: Area:	Clarifier 3 North West		Plant: Updated: 7/9/10	Wastewater Treatment Plant
Personal	Protectiv	e Equipment:		
5	D		2020 2000 -4	
Safety 0	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1.	Always Lock, Tag, and Try to control hazardous energy	
	sources prior to performing maintenance or service on	
	this machine, when removing or bypassing a guard,	
	and/or under any circumstance where the unexpected	
	start-up or energization of the equipment could cause	
	bodily harm.	
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## LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	Concession of the second secon			
Lock	Tag	Hasp		

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Bef	efore Servicing or Maintenance:							
1.	Notify all affected personnel that you intend to lockout the equipment.	5.	Apply hasp, lock, and tag on knife switch. *NOTE* Tag shall include date taken out of service,					
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.					
3.	Identify Clarifier 3 knife switch on the north side of the Sludge Handling Building on the top right of the control panel.	6.	Dissipate or release any stored energy by trying to turn knife switch ON at box located above the motor at the end of walkway of Clarifier 3.					
4.	Denergize knife switch by pulling to OFF position.	7.	Return knife switch to OFF position.					

Energy Sources:	11			
Magnitude:	460V			
Energy Isolation Device & Location:	Control Panel in Sludge Handling Building			
After Servicing or N	laintenance:		1	
<ol> <li>Verify all controls are "</li> <li>Clear machine or equip</li> <li>Make sure all guarding</li> <li>Notify affected personr re-energized.</li> <li>Remove locks, devices</li> <li>Re-energize or power- devices to normal oper</li> </ol>	off" or in neutral position. ment of tools, parts, or people is in place. nel that the machine or equipm , and tags from energy isolatio up machine by returning energ ating position.	e. hent will be n devices. ly isolating	Prepared by: Approvals:	 Date: 7/9/10

Machine:	Clarifier 4		Plant:	Wastewater Treatment Plant
Area:	Drate et a		Updated:	
Personal	Protectiv	e Equipment:		
5	D		AND AND AND	
Safety C	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1. Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	
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## LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	Concession of the second secon			
Lock	Tag	Hasp		

Bef	ore Servicing or Maintenance:		
1.	Notify all affected personnel that you intend to lockout the equipment.	5.	Apply hasp, lock, and tag on knife switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Clarifier 4 knife switch on the north side of the Sludge Handling Building on the top right of the control panel.	6.	Dissipate or release any stored energy by trying to turn knife switch ON at box located above the motor at the end of walkway of Clarifier 4.
4.	Denergize knife switch by pulling to OFF position.	7.	Return knife switch to OFF position.

Energy Sources:	11			
Magnitude:	460V			
Energy Isolation Device & Location:	Control Panel in Sludge Handling Building			
After Servicing or Maintenance:			1	
<ol> <li>Verify all controls are "off" or in neutral position.</li> <li>Clear machine or equipment of tools, parts, or people.</li> <li>Make sure all guarding is in place.</li> <li>Notify affected personnel that the machine or equipment will be re-energized.</li> <li>Remove locks, devices, and tags from energy isolation devices.</li> <li>Re-energize or power-up machine by returning energy isolating devices to normal operating position.</li> </ol>		Prepared by: Approvals:	 Date: 7/9/10	

Machine:	Clarifier 5		Plant	: Wastewater Treatment Plant
Area:	North West		Updated: <u>7/9/10</u>	
Personal	Protectiv	e Equipment:		
5	A			
Safety 0	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	**Clarifier 5 is wired into main breaker in Filter Press Building. It is my suggestion that there be installed an isolated disconnect in order to release any stored energy this may have.**

## LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	Contraction of the second seco			
Lock	Tag	Hasp		

#### Lock

Bef	ore Servicing or Maintenance:		
1.	Notify all affected personnel that you intend to lockout	5.	Apply hasp, lock, and tag on knife switch.
	the equipment.		*NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other		person/persons that took out of service, and work
	materials.		being done.
3.	Identify Clarifier 5 knife switch located above the motor	6.	Dissipate or release any stored energy by trying to
	on control panel in the middle of walkway.		turn knife switch ON at box located above the motor
4.	Denergize knife switch by pulling to OFF position.		at the end of walkway of Clarifier 5.
		7.	Return knife switch to OFF position.

Energy Sources:	14				
Magnitude:	460V				
Energy Isolation Device	Control Panel above motor				
After Servicing or M	laintenance:				
<ol> <li>Verify all controls are "</li> <li>Clear machine or equip</li> <li>Make sure all guarding</li> <li>Notify affected personr re-energized.</li> <li>Remove locks, devices</li> <li>Re-energize or power-u devices to normal oper</li> </ol>	off" or in neutral position. oment of tools, parts, or people is in place. nel that the machine or equipm , and tags from energy isolatio up machine by returning energ rating position.	e. hent will be n devices. y isolating	Prepared by: Approvals:	 Date:	7/9/10



Machine:	Cyclone Fe	ed Pump			Plant:	Wastewater Treat	ment Plant
Area:	Filter Press	Building l	Jpdated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	A		Cent A				
Safety (	Glasses	Steel Toe Shoes	Leathe n	r Gloves (as eeded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> <li>This machine cause</li> </ol>	n be turned off by the cannibal r, but shall be locked out at
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## LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

|--|--|--|--|

Lock

Hasp

Bef	ore Servicing or Maintenance:		
1.	Notify affected personnel that you intend to lockout or tagout the equipment	5.	Apply lock and tag on knife switch.
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Cyclone Feed Pump knife switch on the southeast side of the filter Press Building in the upper left of the control panel.	6. 7.	Dissipate energy by turning Cyclone Feed Pump knife switch ON, located along north wall 3 feet from pump. Return Switch to OFF position.
4.	De-energize knife switch by turning to OFF position.		

Energy Sources:	11		
Magnitude:	460V		
Energy Isolation Device	Control Panel in Filter Press		
& Location:	Building		
A ft and C a multiplication and MA	- !		

#### After Servicing or Maintenance:

- 1. Verify all controls are "off" or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- Notify affected personnel that the machine or equipment will be reenergized.
   Demons leave devices and there from an inclusion in the second se
- 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10



Machine:	Oxidation V	Wheel- Ditch 1 Rotor 1		Plant:	Wastewater Treatm	ent Plant
Area:	South West	t	Updated: 7/9/10			
Personal	Protectiv	e Equipment:				
5	A		3×59 -4-			
Safety (	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>Use caution when motor is off due to the flow of the water still turning rotor.</li> <li>There is possible bloodborne pathogen contact associated with working around oxidation wheels.</li> </ol>
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## LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Bef	ore Servicing or Maintenance:			
1.	Notify all affected personnel that you intend to lockout	5.	Apply hasp, lock, and tag on knife switch.	
	the equipment.		*NOTE* Tag shall include date taken out of service,	
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.	
3.	Identify Ditch 1 Rotor 1 knife switch in the Influent MCC Building on south control panel in the center.	6.	Dissipate or release any stored energy by trying to turn knife switch ON at box located next to the	
4.	Denergize knife switch by pulling to OFF position.	7.	motor. Return knife switch to OFF position.	

Energy Sources:	11					
Magnitude:	460V					
Energy Isolation Device & Location:	Control Panel in Influent MCC Building					
After Servicing or M	aintenance:		_			
<ol> <li>Verify all controls are "of Clear machine or equipm</li> <li>Make sure all guarding is</li> <li>Notify affected personne energized.</li> <li>Remove locks, devices, a</li> <li>Re-energize or power-up devices to normal operation</li> </ol>	f" or in neutral position. nent of tools, parts, or people. s in place. I that the machine or equipment and tags from energy isolation de machine by returning energy is ing position.	will be re- evices. olating	Prepared by Approvals	:	Date:	7/9/10



Machine:	Oxidation V	Vheel- Ditch 1 Rotor 2		Plant:	Wastewater Treatr	ment Plant
Area:	South West	t	Updated: 7/9/10			
Personal	Protectiv	e Equipment:				
5	A		3N59 8050			
Safety (	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	s Nitr	ile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1. Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	<ol> <li>Use caution when motor is off due to the flow of the water still turning rotor.</li> <li>There is possible bloodborne pathogen contact associated with working around oxidation wheels.</li> </ol>
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#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

	Example a first fi		
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#### Lock

Bef	efore Servicing or Maintenance:						
1.	Notify all affected personnel that you intend to lockout	5.	Apply hasp, lock, and tag on knife switch.				
	the equipment.		*NOTE* Tag shall include date taken out of service,				
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.				
3.	Identify Ditch 1 Rotor 2 knife switch in the Influent MCC	6.	Dissipate or release any stored energy by trying to				
	Building on south control panel on the left.		turn knife switch ON at box located next to the				
4.	Denergize knife switch by pulling to OFF position.		motor.				
		7.	Return knife switch to OFF position.				

Energy Sources:	11			
Magnitude:	460V			
Energy Isolation Device & Location:	Control Panel in Influent MCC Building			
After Servicing or Maintenance:				
<ol> <li>Verify all controls are "of Clear machine or equipm</li> <li>Make sure all guarding is</li> <li>Notify affected personne energized.</li> <li>Remove locks, devices, a</li> </ol>	ff" or in neutral position. hent of tools, parts, or people. s in place. I that the machine or equipment w and tags from energy isolation dev	ill be re- Approvals:	 Date:	7/9/10
6. Re-energize or power-up devices to normal operation	o machine by returning energy isol ting position.	ating	 	



Machine:	Oxidation V	Wheel- Ditch 1 Rotor 3		Plant:	Wastewater Treatr	ment Plant
Area:	South West	t	Updated: 7/9/10			
Personal	Protectiv	e Equipment:				
5	A		AND ANTO			
Safety (	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	Niti	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>Use caution when motor is off due to the flow of the water still turning rotor.</li> <li>There is possible bloodborne pathogen contact associated with working around oxidation wheels.</li> </ol>

## LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

	Example a first fi		
•7			

Lock

Hasp

Bef	Before Servicing or Maintenance:					
1.	Notify all affected personnel that you intend to lockout	5.	Apply hasp, lock, and tag on knife switch.			
	the equipment.		*NOTE* Tag shall include date taken out of service,			
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.			
3.	Identify Ditch 1 Rotor 3 knife switch in the Influent MCC Building on north control panel on the left center.	6.	Dissipate or release any stored energy by trying to turn knife switch ON at box located next to the			
4.	Denergize knife switch by pulling to OFF position.	7.	motor. Return knife switch to OFF position.			

Energy Sources:	M				
Magnitude:	460V				
Energy Isolation Device & Location:	Control Panel in Influent MCC Building				
After Servicing or M	aintenance:				
<ol> <li>Verify all controls are "off" or in neutral position.</li> <li>Clear machine or equipment of tools, parts, or people.</li> <li>Make sure all guarding is in place.</li> <li>Notify affected personnel that the machine or equipment will be re-</li> </ol>		Prepared by: Approvals:		Date:	7/9/10

 Notify affected personnel that the machine or equipment will be reenergized.

5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.



Machine:	Oxidation V	Vheel- Ditch 1 Rotor 4		Plant:	Wastewater Treatr	nent Plant
Area:	South West	t	Updated: 7/9/10			
Personal	Protectiv	e Equipment:				
5	A		3N50 8750 -4			
Safety (	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1. Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	<ol> <li>Use caution when motor is off due to the flow of the water still turning rotor.</li> <li>There is possible bloodborne pathogen contact associated with working around oxidation wheels.</li> </ol>
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#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

	Example a first fi		
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Lock

Hasp

Bef	Before Servicing or Maintenance:					
1.	Notify all affected personnel that you intend to lockout	5.	Apply hasp, lock, and tag on knife switch.			
	the equipment.		*NOTE* Tag shall include date taken out of service,			
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.			
3.	Identify Ditch 1 Rotor 4 knife switch in the Influent MCC Building on north control panel on the left center.	6.	Dissipate or release any stored energy by trying to turn knife switch ON at box located next to the			
4.	Denergize knife switch by pulling to OFF position.	7.	motor. Return knife switch to OFF position.			

Energy Sources:	11			
Magnitude:	460V			
Energy Isolation Device	Control Panel in Influent			
& Location:	MCC Building			
After Servicing or M	aintenance:			
1. Verify all controls are "off" or in neutral position.				
2. Clear machine or equipment of tools, parts, or people.		Prepared by:	 Date:	7/9/10
<ol> <li>Make sure all guarding is in place.</li> <li>Notify affected personnel that the machine or equipment will be re-</li> </ol>		Approvals:		

y affected personnel that the machine or equipment will be reenergized.

- 5. Remove locks, devices, and tags from energy isolation devices.
- 6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

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Machine:	Oxidation V	Vheel- Ditch 2 Rotor 1		Plant:	Wastewater Treatr	nent Plant
Area:	Central		Updated: 7/9/10			
Personal	Protectiv	e Equipment:				
5	A		SNSD SNED			
Safety (	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1. Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	<ol> <li>Use caution when motor is off due to the flow of the water still turning rotor.</li> <li>There is possible bloodborne pathogen contact associated with working around oxidation wheels.</li> </ol>
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## LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

Lock

Hasp

Bef	ore Servicing or Maintenance:		
1.	Notify all affected personnel that you intend to lockout	5.	Apply hasp, lock, and tag on knife switch.
	the equipment.		*NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Ditch 2 Rotor 1 knife switch in the Influent MCC Building on south control panel on the left center.	6.	Dissipate or release any stored energy by trying to turn knife switch ON at box located next to the
4.	Denergize knife switch by pulling to OFF position.	7.	motor. Return knife switch to OFF position.

Energy Sources:	11		
Magnitude:	460V		
_			
Energy Isolation Device	Control Panel in Influent		
& Location:	MCC Building		
After Servicing or M	aintenance:		
1. Verify all controls are "of	f" or in neutral position.		
2. Clear machine or equipm	nent of tools, parts, or people.	Prepared by	 Date: 7/9/10
3. Make sure all guarding is	s in place.		
4. Notify affected personne	I that the machine or equipment will be	re- Approvals	 
energized.			
5. Remove locks, devices, a	and tags from energy isolation devices.		 
	<b>S S</b>		

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.



Machine:	Oxidation V	Vheel- Ditch 2 Rotor 2		Plant: V	Vastewater Treatr	nent Plant
Area:	Central		Updated: 7/9/10	-		
Personal	Protectiv	e Equipment:				
5	A		5N35 			
Safety (	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	Nitrile r	e Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1. Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	<ol> <li>Use caution when motor is off due to the flow of the water still turning rotor.</li> <li>There is possible bloodborne pathogen contact associated with working around oxidation wheels.</li> </ol>
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#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

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	Exercise With the second secon			
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#### Lock

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Hasp

Беі	ore servicing or Maintenance:		
1.	Notify all affected personnel that you intend to lockout	5.	Apply hasp, lock, and tag on knife switch.
	the equipment.		*NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other		person/persons that took out of service, and work
	materials.		being done.
3.	Identify Ditch 2 Rotor 2 knife switch in the Influent MCC	6.	Dissipate or release any stored energy by trying to
	Building on south control panel on the left.		turn knife switch ON at box located next to the
4.	Denergize knife switch by pulling to OFF position.		motor.
		7.	Return knife switch to OFF position.

Energy Sources:	11				
Magnitude:	460V				
Energy Isolation Device & Location:	Control Panel in Influent MCC Building				
After Servicing or M	laintenance:				
<ol> <li>Verify all controls are "of 2. Clear machine or equipm 3. Make sure all guarding is 4. Notify affected personne energized.</li> <li>5. Remove locks, devices, a</li> <li>6. Re-energize or power-up devices to normal operation</li> </ol>	ff" or in neutral position. nent of tools, parts, or people. s in place. I that the machine or equipment w and tags from energy isolation devi machine by returning energy isola ting position.	Prepared by II be re- Approvals ces. ting	:	Date:	7/9/10



Machine:	Oxidation V	Vheel- Ditch 2 Rotor 3		Plant:	Wastewater Treatn	nent Plant
Area:	Central		Updated: 7/9/10			
Personal	Protectiv	e Equipment:				
5	A		5×55 -4-			
Safety (	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1. Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	<ol> <li>Use caution when motor is off due to the flow of the water still turning rotor.</li> <li>There is possible bloodborne pathogen contact associated with working around oxidation wheels.</li> </ol>
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## LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

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Беі	ore servicing or Maintenance:			
1.	Notify all affected personnel that you intend to lockout	5.	Apply hasp, lock, and tag on knife switch.	
	the equipment.		*NOTE* Tag shall include date taken out of service,	
2.	Clear the area and equipment of tools, parts and other		person/persons that took out of service, and work	
	materials.		being done.	
3.	Identify Ditch 2 Rotor 3 knife switch in the Influent MCC	6.	Dissipate or release any stored energy by trying to	
	Building on north control panel in the center.		turn knife switch ON at box located next to the	
4.	Denergize knife switch by pulling to OFF position.		motor.	
		7.	Return knife switch to OFF position.	

Energy Sources:	M				
Magnitude:	460V				
Energy Isolation Device & Location:	Control Panel in Influent MCC Building				
<ol> <li>After Servicing or M</li> <li>Verify all controls are "of</li> <li>Clear machine or equipm</li> <li>Make sure all guarding is</li> <li>Notify affected personne energized.</li> <li>Remove locks, devices, a</li> <li>Re-energize or power-up devices to normal operat</li> </ol>	aintenance: f" or in neutral position. hent of tools, parts, or people. in place. I that the machine or equipment we and tags from energy isolation de machine by returning energy iso ing position.	will be re- vices. lating	Prepared by: Approvals:	 Dat	e: 7/9/10



Machine:	Oxidation V	Vheel- Ditch 2 Rotor 4		Plant:	Wastewater Treatn	nent Plant
Area:	Central		Updated: 7/9/10			
Personal	Protectiv	e Equipment:				
5	A		ANSO ANSO			
Safety (	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1. Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	<ol> <li>Use caution when motor is off due to the flow of the water still turning rotor.</li> <li>There is possible bloodborne pathogen contact associated with working around oxidation wheels.</li> </ol>
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## LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

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Lock ra Camulaing ar Maintanana Hasp

Dei	ore servicing or maintenance.		
1.	Notify all affected personnel that you intend to lockout	5.	Apply hasp, lock, and tag on knife switch.
	the equipment.		*NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other		person/persons that took out of service, and work
	materials.		being done.
3.	Identify Ditch 2 Rotor 4 knife switch in the Influent MCC	6.	Dissipate or release any stored energy by trying to
	Building on north control panel on the right center.		turn knife switch ON at box located next to the
4.	Denergize knife switch by pulling to OFF position.		motor.
		7.	Return knife switch to OFF position.

Energy Sources:	11					
Magnitude:	460V					
-						
Energy Isolation Device	Control Panel in Influent					
& Location:	MCC Building					
After Servicing or M	laintenance:					
1. Verify all controls are "of	ff" or in neutral position.					
2. Clear machine or equipm	nent of tools, parts, or people.		Prepared by	:	Date:	7/9/10
3. Make sure all guarding is	s in place.					
4. Notify affected personne	I that the machine or equipment w	/ill be re-	Approvals	·		
energized.						
5. Remove locks, devices, a	and tags from energy isolation dev	rices.				
6 Re-energize or nower-up	machino by roturning onoray isol	ating				

energize or power-up machine by returning energy isolating devices to normal operating position.



Machine:	Oxidation V	Vheel- Ditch 3 Rotor 1		Plant:	Wastewater Treatr	nent Plant
Area:	South East		Updated: 7/9/10			
Personal	Protectiv	e Equipment:				
5	A		3NS9 8NS9 -4- 44-			
Safety (	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1. Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	<ol> <li>Use caution when motor is off due to the flow of the water still turning rotor.</li> <li>There is possible bloodborne pathogen contact associated with working around oxidation wheels.</li> </ol>
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#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

	CONCEPTERATION OF THE STATE OF		
-1			

Lock

Before Servicing or Maintenance:							
1.	Notify all affected personnel that you intend to lockout	5.	Apply hasp, lock, and tag on knife switch.				
	the equipment.		*NOTE* Tag shall include date taken out of service,				
2.	Clear the area and equipment of tools, parts and other		person/persons that took out of service, and work				
	materials.		being done.				
3.	Identify Ditch 3 Rotor 1 knife switch on the southeast	6.	Dissipate or release any stored energy by trying to				
	first floor of the Filter Press Building located on the right		turn knife switch ON at box located next to the				
	side of the control panel.		motor.				
4.	Denergize knife switch by pulling to OFF position.	7.	Return knife switch to OFF position.				

E	nergy Sources:	11							
	Magnitude:	460V							
E	nergy Isolation Device & Location:	Control Panel in Filter Press Building							
Aft	After Servicing or Maintenance:								
1. 2. 3. 4. 5. 6.	Verify all controls are "of Clear machine or equipm Make sure all guarding is Notify affected personnel energized. Remove locks, devices, a Re-energize or power-up devices to normal operat	f" or in neutral position. ent of tools, parts, or people. in place. that the machine or equipment and tags from energy isolation de machine by returning energy is ing position.	will be re- evices. olating	Prepared by Approvals	:	Da	ate:	7/9/10	



Machine:	Oxidation V	Vheel- Ditch 3 Rotor 2		Plant:	Wastewater Treatr	ment Plant
Area:	South East		Updated: 7/9/10			
Personal	Protectiv	e Equipment:				
5	A		8×55 -4-			
Safety (	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1. Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.2.	<ul> <li>Use caution when motor is off due to the flow of the water still turning rotor.</li> <li>There is possible bloodborne pathogen contact associated with working around oxidation wheels.</li> </ul>
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#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

Lock

Bef	ore Servicing or Maintenance:		
1.	Notify all affected personnel that you intend to lockout	5.	Apply hasp, lock, and tag on knife switch.
	the equipment.		*NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Ditch 3 Rotor 2 knife switch on the southeast	6.	Dissipate or release any stored energy by trying to
	first floor of the Filter Press Building located on the right		turn knife switch ON at box located next to the
	side of the control panel.		motor.
4.	Denergize knife switch by pulling to OFF position.	7.	Return knife switch to OFF position.

Energy Sources:	11				
Magnitude:	460V				
Energy Isolation Device & Location:	Control Panel in Filter Press Building				
<ol> <li>After Servicing or M</li> <li>Verify all controls are "of</li> <li>Clear machine or equipm</li> <li>Make sure all guarding is</li> <li>Notify affected personne energized.</li> <li>Remove locks, devices, a</li> <li>Re-energize or power-up devices to normal operation</li> </ol>	aintenance: f" or in neutral position. nent of tools, parts, or people. in place. I that the machine or equipment and tags from energy isolation de machine by returning energy is ing position.	will be re- evices. olating	Prepared by: Approvals:	 Date:	7/9/10



Machine:	Oxidation V	Vheel- Ditch 3 Rotor 3		Plant:	Wastewater Treatr	ment Plant
Area:	South East		Updated: 7/9/10			
Personal	Protectiv	e Equipment:				
5	A		5×50 -4-			
Safety (	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	s Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1. Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	<ol> <li>Use caution when motor is off due to the flow of the water still turning rotor.</li> <li>There is possible bloodborne pathogen contact associated with working around oxidation wheels.</li> </ol>
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#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

	CONCEPTERATION OF THE STATE OF		
-1			

Lock

Bef	ore Servicing or Maintenance:		
1.	Notify all affected personnel that you intend to lockout	5.	Apply hasp, lock, and tag on knife switch.
	the equipment.		*NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Ditch 3 Rotor 3 knife switch on the southeast first floor of the Filter Press Building located on the right center of the control panel.	6.	Dissipate or release any stored energy by trying to turn knife switch ON at box located next to the motor.
4.	Denergize knife switch by pulling to OFF position.	7.	Return knife switch to OFF position.

Energy Sources:	11				
Magnitude:	460V				
Energy Isolation Device & Location:	Control Panel in Filter Press Building				
<ol> <li>After Servicing or M</li> <li>Verify all controls are "of 2. Clear machine or equipm</li> <li>Make sure all guarding is</li> <li>4. Notify affected personne energized.</li> <li>5. Remove locks, devices, a</li> <li>6. Re-energize or power-up devices to normal operation</li> </ol>	aintenance: ff" or in neutral position. eent of tools, parts, or people. in place. I that the machine or equipment and tags from energy isolation de machine by returning energy is ing position.	will be re- evices. olating	Prepared by: Approvals:	Date:	7/9/10



Machine:	Oxidation V	Vheel- Ditch 3 Rotor 4		Plant:	Wastewater Treatr	ment Plant
Area:	South East		Updated: 7/9/10			
Personal	Protectiv	e Equipment:				
5	A		5×50 -4-			
Safety (	Glasses	Steel Toe Shoes	Leather Gloves (as needed)	s Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1. Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	<ol> <li>Use caution when motor is off due to the flow of the water still turning rotor.</li> <li>There is possible bloodborne pathogen contact associated with working around oxidation wheels.</li> </ol>
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#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

Example 2 and 2 an		

Lock

Bef	ore Servicing or Maintenance:		
1.	Notify all affected personnel that you intend to lockout	5.	Apply hasp, lock, and tag on knife switch.
	the equipment.		*NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Ditch 3 Rotor 4 knife switch on the southeast first floor of the Filter Press Building located on the right center of the control panel.	6.	Dissipate or release any stored energy by trying to turn knife switch ON at box located next to the motor.
4.	Denergize knife switch by pulling to OFF position.	7.	Return knife switch to OFF position.

Energy Sources:	11				
Magnitude:	460V				
Energy Isolation Device & Location:	Control Panel in Filter Press Building				
<ol> <li>After Servicing or Maintenance:         <ol> <li>Verify all controls are "off" or in neutral position.</li> <li>Clear machine or equipment of tools, parts, or people.</li> <li>Make sure all guarding is in place.</li> <li>Notify affected personnel that the machine or equipment will be re- energized.</li> </ol> </li> </ol>		Prepared by: Approvals:	 Date:	7/9/10	
<ol> <li>Remove locks, devices, a</li> <li>Re-energize or power-up devices to normal operat</li> </ol>	and tags from energy isolation de machine by returning energy is ing position.	evices. olating		 	



Machine:	Drum Boos	ter Pump			Plant:	Wastewater Treat	tment Plant
Area:	Filter Press	Building	Updated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	A		CENE	anso Maria			
Safety (	Glasses	Steel Toe Shoes	Leathe n	r Gloves (as eeded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	2. Use caution, floor may be slippery.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

|--|--|--|

Lock

Hasp

Bef	ore Servicing or Maintenance:		
1.	Notify affected personnel that you intend to lockout or tagout the equipment.	5.	Apply lock and tag on handle switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Drum Booster Pump panel on the south wall, left of the pump.	6.	Turn valves on left and right side of pump to OFF position.
4.	De-energize handle switch by turning to OFF position.	7. 8.	Dissipate energy by turning switch on pump to ON. Return switch to OFF position.

Energy Sources:	12				
Magnitude:	460V				
Energy Isolation Device	Control Panel on wall, left of				
& Location:	pump				
after Servicing or Maintenance:					

- Verify all controls are "off" or in neutral position. 1.
- 2. Clear machine or equipment of tools, parts, or people. Make sure all guarding is in place. 3.
- 4.
- Notify affected personnel that the machine or equipment will be reenergized. 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10



Machine:	Drum Scree	en			Plant:	Wastewater Treatr	ment Plant
Area:	Filter Press	Building	Updated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	A		AL AL	and a second			
Safety (	Glasses	Steel Toe Shoes	Leathe n	r Gloves (as eeded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>Use caution when machine is ON due to the turning of the drum.</li> <li>This machine can be turned off by the cannibal system computer, but shall be locked out at breaker.</li> </ol>
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#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Lock	Tag	Hasp		

Hasp

Bef	efore Servicing or Maintenance:					
1.	Notify affected personnel that you intend to lockout or	5.	Apply lock and tag on handle switch.			
2	Clear the area and equipment of tools, parts and other		"NOTE" Tay shall include date taken out of service, and work being			
Ζ.	materials.		done.			
3.	Identify Drum Screen knife switch on the southeast side of the filter Press Building in the lower left of the control	6.	Dissipate energy by turning Drum Screen knife switch ON located along north wall 3 feet from drum screen.			
	panei.	1.	Return Switch to OFF position.			
4.	De-energize nandle switch by turning to OFF position.					

Energy Sources:	11		
Magnitude:	460V		
Energy Isolation Device	Control Panel in Filter Press		
& Location:	Building		
After Comising on M			

#### After Servicing or Maintenance:

- Verify all controls are "off" or in neutral position. 1.
- 2. Clear machine or equipment of tools, parts, or people.
- Make sure all guarding is in place. 3.
- 4. Notify affected personnel that the machine or equipment will be reenergized.
- 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10



Machine:	Effluent Scr	rew 1			Plant:	Wastewater Treatm	ent Plant
Area:	North	L	Jpdated:	7/9/10			
Personal P	rotective E	quipment:					
5	D					5N35 8035	
Safety C	Slasses	Steel Toe Rubber Boots	Nitrile Glove	s (as needed)	)	eather Gloves (as needed)	Hardhat (as needed)

#### SAFE OPERATING PROCEDURES:

1.	Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard,	2.	Boom truck may be needed when performing work on bottom of auger.
	and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	3.	There is possible bloodborne pathogen contact associated with working around Screw Pump.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	Conception of the second secon			
Lock	Tag	Hach		

Lock

Тад

Hasp

#### Before Servicing or Maintenance:

1. Notify affected personnel that you intend to lockout the equipment.

- 2. Clear the area and equipment of tools, parts and other materials.
- 3. Identify Effluent Screw 1 knife switch in the Effluent MCC Building on north control panel on the left side.
- 4. Denergize knife switch by pulling to OFF position.

 Apply hasp, lock, and tag on knife switch.
 \*NOTE\* Tag shall include date taken out of service, person/persons that took out of service, and work being done.

- Dissipate or release any stored energy by trying to turn knife switch ON at box located above the motor.
   Deturn knife switch to OFF
- 7. Return knife switch to OFF position.
- If work needs to be done to bottom of auger close gate 1 at the bottom of auger clock wise until closed.

Energy Sources:	11		
Magnitude:	460V		
Energy Isolation Device & Location:	Control panel in Effluent MCC Building		

#### After Servicing or Maintenance:

- 1. Verify all controls are OFF or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be re-energized.
- 5. Remove locks, devices, and tags from energy isolation devices.
- 6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.\_\_\_\_\_

Prepared by: \_\_\_\_\_\_

Date: 7/9/10



Machine:	Effluent Scre	ew 2			Plant:	Wastewater Treatme	ent Plant
Area:	North	L	Jpdated:	7/9/10			
Personal P	rotective E	quipment:					
5	A	K				8N99) 8N99 -4- H4-	
Safety 0	Glasses	Steel Toe Rubber Boots	Nitrile Glov	ves (as needed)	Le	eather Gloves (as needed)	Hardhat (as needed)

#### SAFE OPERATING PROCEDURES:

1.	Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard,	2.	Boom truck may be needed when performing work on bottom of auger.
	and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	3.	There is possible bloodborne pathogen contact associated with working around Screw Pump.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	Conception of the second secon			
Lock	Tag	Hach		

Lock

Тад

Hasp

#### Before Servicing or Maintenance:

1. Notify affected personnel that you intend to lockout the equipment.

- 2. Clear the area and equipment of tools, parts and other materials.
- 3. Identify Effluent Screw 2 knife switch in the Effluent MCC Building on south control panel in the center.
- 4. Denergize knife switch by pulling to OFF position.

 Apply hasp, lock, and tag on knife switch.
 \*NOTE\* Tag shall include date taken out of service, person/persons that took out of service, and work being done.

#### Dissipate or release any stored energy by trying to turn knife switch ON at box located above the motor. Deturn knife switch to OFF

- 7. Return knife switch to OFF position.
- 8. If work needs to be done to bottom of auger close gate 2 at the bottom of auger clock wise until closed.

Energy Sources:	11		
Magnitude:	460V		
Energy Isolation Device & Location:	Control panel in Effluent MCC Building		

#### After Servicing or Maintenance:

- 1. Verify all controls are OFF or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be re-energized.
- 5. Remove locks, devices, and tags from energy isolation devices.
- 6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.\_\_\_\_\_

Prepared by:

Date: 7/9/10



Machine:	Effluent Scr	ew 3			Plant:	Wastewater Treatm	ent Plant
Area:	North	l	Jpdated:	7/9/10			
Personal P	rotective E	quipment:					
5	A	K				5N35) 8N35) -4-	
Safety C	Glasses	Steel Toe Rubber Boots	Nitrile Glo	ves (as needed)	Le	eather Gloves (as needed)	Hardhat (as needed)

#### SAFE OPERATING PROCEDURES:

1.	Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard,	2.	Boom truck may be needed when performing work on bottom of auger.
	and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	3.	There is possible bloodborne pathogen contact associated with working around Screw Pump.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	Conception of the second secon			
Lock	Tag	Hach		

Lock

Tag

Hasp

#### Before Servicing or Maintenance:

1. Notify affected personnel that you intend to lockout the equipment.

- 2. Clear the area and equipment of tools, parts and other materials.
- 3. Identify Effluent Screw 3 knife switch in the Effluent MCC Building on south control panel on the right side.
- 4. Denergize knife switch by pulling to OFF position.

 Apply hasp, lock, and tag on knife switch.
 \*NOTE\* Tag shall include date taken out of service, person/persons that took out of service, and work being done.

#### Dissipate or release any stored energy by trying to turn knife switch ON at box located above the motor. Deturn knife switch to OFF activities

- 7. Return knife switch to OFF position.
- 8. If work needs to be done to bottom of auger close gate 3 at the bottom of auger clock wise until closed.

Energy Sources:	11		
Magnitude:	460V		
Energy Isolation Device & Location:	Control panel in Effluent MCC Building		

#### After Servicing or Maintenance:

- 1. Verify all controls are OFF or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be re-energized.
- 5. Remove locks, devices, and tags from energy isolation devices.
- 6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10



Machine:	Exhaust Fa	n 1			Plant:	Wastewater Treatment Plant
Area:	Sludge Han	ndling Building	Updated:	7/9/10		
Personal	Protectiv	e Equipment:				
5	A					
Safety C	Slasses	Steel Toe Shoes	Hearing Protect	tion (as nee	eded)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>Use caution when using step ladder to work on fan.</li> <li>This machine only has one lock out point located on control panel in Sludge Handling Building.</li> </ol>

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	CONCEPTERATION OF THE PARTY OF			
Lock	Taq	Hasp		

Lock

Hasp

#### Before Servicing or Maintenance:

DCI	ore servicing or maintenance.		
1.	Notify affected personnel that you intend to lockout the equipment.	5.	Apply hasp, lock, and tag on knife switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Exhaust Fan 1 knife switch on the north side of the Sludge Handling Building in the left center of the control panel.		
4.	Denergize knife switch by pulling to OFF position.		

Energy Sources:	M					
Magnitude:	460V					
Energy Isolation Device & Location:	Control Panel in Sludge Handling Building					
After Servicing or Maintenance:						
<ol> <li>Verify all controls are "of 2. Clear machine or equipm 3. Make sure all guarding is 4. Notify affected personne energized.</li> </ol>	ff" or in neutral position. nent of tools, parts, or people. s in place. I that the machine or equipment v	will be re-	Prepared by Approvals	:	Date:	7/9/10

5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.



Machine:	Exhaust Fa	n 2			Plant:	Wastewater Treatment Plant
Area:	Sludge Har	ndling Building	Updated:	7/9/10		
Personal	Protectiv	e Equipment:				
5	A					
Safety 0	Slasses	Steel Toe Shoes	Hearing Protect	tion (as nee	eded)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>Use caution when using step ladder to work on fan.</li> <li>This machine only has one lock out point located on control panel in Sludge Handling Building.</li> </ol>

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	CONCEPTERATION OF THE PARTY OF			
Lock	Taq	Hasp		

Lock

Hasp

#### Before Servicing or Maintenance:

	ore berviering of Marintenance.		
1.	Notify affected personnel that you intend to lockout the equipment.	5.	Apply hasp, lock, and tag on knife switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Exhaust Fan knife switch on the north side of the Sludge Handling Building in the right center of the control panel.		
4.	Denergize knife switch by pulling to OFF position.		

Energy Sources:	11			
Magnitude:	460V			
Energy Isolation Device & Location:	Control Panel in Sludge Handling Building			
After Servicing or M	aintenance:			
<ol> <li>Verify all controls are "of</li> <li>Clear machine or equipm</li> <li>Make sure all guarding is</li> <li>Notify affected personnel</li> </ol>	f" or in neutral position. ent of tools, parts, or people. in place. that the machine or equipment will be re-	Prepared by: Approvals:	 Date:	7/9/10

energized.

5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.



Machine:	Filter Boost	ter Pump			Plant:	Wastewater Treat	ment Plant
Area:	Filter Press	Building	Updated:	7/9/10			
Personal	Protectiv	ve Equipment:					
L	A		CENE				
Safety	Glasses	Steel Toe Shoes	Leathe n	r Gloves (as eeded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	2. Use caution, floor may be slippery.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

• • •

	CONCEPT Description Descriptio		
24			

Lock

Hasp

вет	ore Servicing or Maintenance:		
1.	Notify affected personnel that you intend to lockout or	5.	Apply lock and tag on handle switch.
	tagout the equipment.		*NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other		person/persons that took out of service, and work being
	materials.		done.
3.	Identify Filter Booster Pump panel on the south wall, left	6.	Turn valve on pump clock-wise until valve is closed.
	of the pump.	7.	Dissipate energy by turning switch on pump to ON.
4.	De-energize handle switch by turning to OFF position.	8.	Return switch to OFF position.

Energy Sources:	AL					
Magnitude:	460V					
Energy Isolation Device	Control Panel on wall, left of					
& Location:	pump					
After Servicing or Maintenance:						
<ol> <li>Verify all controls are "of</li> <li>Clear machine or equipm</li> </ol>	f" or in neutral position. ent of tools, parts, or people.		Prepared by:		Date:	7/9/10

- 'erify all controls are "off" or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people. 3.
- Make sure all guarding is in place. 4.
- Notify affected personnel that the machine or equipment will be reenergized.
- 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Approvals:



Machine:	Filter Press				Plant:	Wastewater Treatr	ment Plant
Area:	Filter Press	Building	Updated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	A		Cent F	ana			
Safety C	Glasses	Steel Toe Shoes	Leathe	r Gloves (as eeded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous</li></ol>	<ul> <li>When changing press belt, use extreme caution due</li></ul>
energy sources prior to performing maintenance or	to the rollers must be turning. <li>There is possible bloodborne pathogen contact</li>
service on this machine, when removing or <li>bypassing a guard, and/or under any circumstance</li>	associated with working around oxidation wheels. <li>This machine can be turned off by the cannibal</li>
where the unexpected start-up or energization of	system computer, but shall be locked out at
the equipment could cause bodily harm.	breaker.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

<b>A</b>	CALCULATION OF THE PARTY OF THE			
Lock	Тад	Hasp		

Before Servicing or Maintenance:							
Notify affected personnel that you intend to lockout or	5.	Apply lock and tag on handle switch.					
tagout the equipment.		*NOTE* Tag shall include date taken out of service,					
Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.					
Identify control board upstairs of Filter Press Building. (stairs located at south eastern part of building)	6.	Dissipate energy by pushing ON power buttons to Water control valve, Belt drive, and Sludge Conveyor.					
De-energize handle switch by turning to OFF position.	7.	Return Buttons to OFF position.					
	<b>Fore Servicing or Maintenance:</b> Notify affected personnel that you intend to lockout or tagout the equipment. Clear the area and equipment of tools, parts and other materials. Identify control board upstairs of Filter Press Building. (stairs located at south eastern part of building) De-energize handle switch by turning to OFF position.	Fore Servicing or Maintenance:Notify affected personnel that you intend to lockout or tagout the equipment.5.Clear the area and equipment of tools, parts and other materials.6.Identify control board upstairs of Filter Press Building. (stairs located at south eastern part of building) De-energize handle switch by turning to OFF position.7.					

Energy Source	<u>s:</u>	11						
Magnit	ıde:	460V						
Energy Isolation De & Loca	vice ion:	Control board upstairs of Filter Press Building						
After Servicing	or N	laintenance:						
<ol> <li>Verify all controls a</li> <li>Clear machine or e</li> <li>Make sure all guar</li> <li>Notify affected per energized.</li> <li>Remove locks, dev</li> <li>Re-energize or pov devices to normal</li> </ol>	re "o quipn ling is sonne ces, a ver-up pera	ff" or in neutral position. hent of tools, parts, or people. s in place. I that the machine or equipment and tags from energy isolation de p machine by returning energy is ting position.	will be re- evices. olating	Prepared by: Approvals:	 	Dat	<u>e:</u>	7/9/10



Machine:	Grit Blower				Plant:	Wastewater Treatr	nent Plant
Area:	North Centr	ral l	Jpdated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	A		Cent A	10000			
Safety C	Glasses	Steel Toe Shoes	Leathe n	r Gloves (as eeded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always perform Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>Use caution out on walkway while working on motor or changing filter.</li> </ol>
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#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	Example 2 and 2 an			
Lock	Tag	Hasp		

Bef	Before Servicing or Maintenance:							
1.	Notify all affected personnel that you intend to lockout	5.	Apply hasp, lock, and tag on knife switch.					
	the equipment.		*NOTE* Tag shall include date taken out of service,					
2.	Clear the area and equipment of tools, parts and other		person/persons that took out of service, and work					
	materials.		being done.					
3.	Identify Grit Blower knife switch in the Influent MCC	6.	Dissipate or release any stored energy by trying to					
	Building on north control panel at top left.		turn knife switch ON at box located right of the					
4.	Denergize knife switch by pulling to OFF position.		motor.					
		7.	Return knife switch to OFF position.					

Energy Sources:	11					
Magnitude:	460V					
Energy Isolation Device & Location:	Control panel in Influent Control Building					
After Servicing or N	_					
<ol> <li>Verify all controls are "c</li> <li>Clear machine or equipt</li> <li>Make sure all guarding i</li> <li>Notify affected personne energized.</li> <li>Remove locks, devices,</li> <li>Re-energize or power-u devices to normal operation</li> </ol>	ff" or in neutral position. nent of tools, parts, or people. s in place. el that the machine or equipment and tags from energy isolation d p machine by returning energy is ting position.	t will be re- evices. solating	Prepared by: Approvals:	 	Date:	7/9/10



Machine:	Grit Screw				Plant:	Wastewater Treat	ment Plant
Area:	North Centi	ral l	Jpdated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	A		Cevel Color				
Safety (	Glasses	Steel Toe Shoes	Leathei ne	Gloves (as eeded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

1.	Always perform Lock, Tag, and Try to control	2. There is possible bloodborne pathogen contact
	hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily	associated with working around oxidation wheels.
	nann.	

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

Lock

Hasp

Bef	Before Servicing or Maintenance:						
1.	Notify all affected personnel that you intend to	5.	Apply hasp, lock, and tag on knife switch.				
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.				
3.	Identify Grit Screw knife switch in the Influent MCC Building on north control panel at top left.	6.	Dissipate or release any stored energy by trying to turn knife switch ON and pushing Start button at box				
4.	Denergize knife switch by pulling to OFF position.	7.	Return knife switch to OFF position and press Stop button.				

Energy Sources:	11		
Magnitude:	460V		
Energy Isolation Device & Location:	Control panel in Influent Control Building		
After Servicing or M	aintenance:		
<ol> <li>Verify all controls are "of</li> <li>Clear machine or equipm</li> <li>Make sure all guarding is</li> <li>Notify affected personnel energized.</li> <li>Remove locks, devices, a</li> </ol>	f" or in neutral position. Tent of tools, parts, or people. In place. I that the machine or equipment will be re- and tags from energy isolation devices.	Prepared by: Approvals:	 Date: 7/9/10

devices to normal operating position.



Machine:	Holding Ta	nk Blower 1		Plant:	Wastewater Treatment Plant
Area:	Sludge Har	ndling Building	Updated: 7/9/10		
Personal	Protectiv	e Equipment:			
5	D		BNSD Har Har		
Safety (	Glasses	Steel Toe Shoes	Leather Gloves (as need	ded)	Hearing Protection (as needed)

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	2. This machine only has one lock out point located on control panel in Sludge Handling Building.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

|--|--|--|

Lock

Hasp

#### Tag Before Servicing or Maintenance:

1.	Notify affected personnel that you intend to lockout the equipment.	5.	Apply hasp, lock, and tag on knife switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Holding Tank Blower 1 knife switch on the north side of the Sludge Handling Building in the left center of the control panel.		
4.	Denergize knife switch by pulling to OFF position.		

Energy Sources:	11			
Magnitude:	460V			
Energy Isolation Device & Location:	Control Panel in Sludge Handling Building			
After Servicing or M	aintenance:			
<ol> <li>Verify all controls are "of</li> <li>Clear machine or equipm</li> </ol>	f" or in neutral position. ent of tools, parts, or people.	Prepared by:	 Date:	7/9/10

Approvals:

#### Make sure all guarding is in place. 3.

Notify affected personnel that the machine or equipment will be re-4. energized.

5. Remove locks, devices, and tags from energy isolation devices.

Re-energize or power-up machine by returning energy isolating 6. devices to normal operating position.



Machine:	Holding Tai	nk Blower 2		Plant:	Wastewater Treatment Plant
Area:	Sludge Har	ndling Building	Updated: 7/9/10		
Personal	Protectiv	e Equipment:			
5	D		BN30 BN30		
Safety 0	Glasses	Steel Toe Shoes	Leather Gloves (as need	ed)	Hearing Protection (as needed)

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	2. This machine only has one lock out point located on control panel in Sludge Handling Building.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Lock

Hasp

#### Tag Before Servicing or Maintenance:

1.	Notify affected personnel that you intend to lockout the equipment.	5.	Apply hasp, lock, and tag on knife switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Holding Tank Blower 2 knife switch on the north side of the Sludge Handling Building in the right center of the control panel.		
4.	Denergize knife switch by pulling to OFF position.		

Energy Sources:	11				
Magnitude:	460V				
Energy Isolation Device & Location:	Control Panel in Sludge Handling Building				
After Servicing or M	aintenance:				
<ol> <li>Verify all controls are "of</li> <li>Clear machine or equipm</li> <li>Make sure all guarding is</li> </ol>	f" or in neutral position. Thent of tools, parts, or people.	Prepared by	/:	Date:	7/9/10
<ol> <li>Make sure an guarding is</li> <li>Notify affected personnel energized.</li> </ol>	I that the machine or equipment will be i	e- Approvals	S:		

5. Remove locks, devices, and tags from energy isolation devices.

Re-energize or power-up machine by returning energy isolating 6. devices to normal operating position.



Machine:	Inert Pump				Plant:	Wastewater Treatr	ment Plant
Area:	Filter Press	Building l	Updated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	A		Cent A	2000 1000			
Safety C	Glasses	Steel Toe Shoes	Leathe	r Gloves (as eeded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>This machine can be turned off by the cannibal system computer, but shall be locked out at breaker.</li> </ol>
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#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

• • •

The second	

Lock

Hasp

вет	ore Servicing or Maintenance:		
1.	Notify affected personnel that you intend to lockout or	5.	Apply lock and tag on handle switch.
	tagout the equipment.		*NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other		person/persons that took out of service, and work being
	materials.		done.
3.	Identify Inert Pump knife switch on the southeast side of	6.	Dissipate energy by turning Inert Pump knife switch
	the filter Press Building in the upper left of the control		located along north wall 3 feet from pump ON.
	panel.	7.	Return Switch to OFF position.
4.	De-energize handle switch by turning to OFF position.		

Energy Sources:	11				
Magnitude:	460V				
Energy Isolation Device	Control Panel in Filter Press				
& Location:	Building				
Sten Complete on Meintenenee					

#### After Servicing or Maintenance:

- 1. Verify all controls are "off" or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- Notify affected personnel that the machine or equipment will be reenergized.
   Demons leave devices and term from an inclusion of the second sec
- 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Approvals:

Date: 7/9/10



Machine:	Interchange	e Mixer 1			Plant:	Wastewater Trea	atment Plant
Area:	North East	l	Jpdated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	N		Cent	anaro Heren			
Safety (	Glasses	Steel Toe Shoes	Leathe n	r Gloves (as eeded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or</li> <li>If works need to be done to prop, winch boom must be cranked forward till prop is visible.</li> <li>This machine can be turned off by the cannibal</li> </ol>		
bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>If works need to be done to prop, winch boom must be cranked forward till prop is visible.</li> <li>This machine can be turned off by the cannibal system computer, but shall be locked out at breaker.</li> </ol>

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Lock	Tag	Hasp		

Hasp

Bef	ore Servicing or Maintenance:		
1.	Notify affected personnel that you intend to lockout or	5.	Apply lock and tag on handle switch.
	tagout the equipment.		^NOTE^ Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other		person/persons that took out of service, and work being
	materials.		done.
3.	Identify Interchange Mixer 1 knife switch on the southeast side of the Filter Press Building in the lower	6.	Dissipate energy by turning Mixer 1 switch located beside winch boom ON.
	center of the control panel.	7.	Return Switch to OFF position.
4.	De-energize handle switch by turning to OFF position.		
1			

Energy Sources:	11					
Magnitude:	460V					
Energy Isolation Device	Control Panel in Filter Press					
& Location:	Building					
After Completing on Meintenenee.						

#### After Servicing or Maintenance:

- Verify all controls are "off" or in neutral position. 1.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be reenergized.
- 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10



Machine:	Interchange	e Mixer 2		I	Plant:	Wastewater Tre	atment Plant	
Area:	North East		Updated: 7/	9/10				
Personal	Protectiv	e Equipment:						
5	A		BNSD					
Safety (	Glasses	Steel Toe Shoes	Leather GI need	oves (as ed)	Nit	rile Gloves (as needed)		

#### SAFE OPERATING PROCEDURES:

	<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> <li>If wor be cra 3. This m syster</li> </ol>	rks need to be done to prop, winch boom must anked forward till prop is visible. machine can be turned off by the cannibal m computer, but shall be locked out at ser.
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## LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

0	DANGER		

Hasp

Bef	ore Servicing or Maintenance:		
1.	Notify affected personnel that you intend to lockout or tagout the equipment.	5.	Apply lock and tag on handle switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Interchange Mixer 2 knife switch on the southeast side of the Filter Press Building in the left center at the top of the control panel	6. 7	Dissipate energy by turning Mixer 2 switch located beside winch boom ON. Return Switch to OFF position
4.	De-energize handle switch by turning to OFF position.		
		•	

Energy Sources:	12					
Magnitude:	460V					
Energy Isolation Device	Control Panel in Filter Press					
& Location:	Building					
After Servicing or Maintenance						

#### vicing or Maintenance

- 1. Verify all controls are "off" or in neutral position.
- Clear machine or equipment of tools, parts, or people. 2.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be reenergized.
- 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Approvals:

Date: 7/9/10



Machine:	Interchange	e Mixer 3			Plant:	Wastewater Treat	ment Plant
Area:	North East	l	Updated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	A		Sevel Sevel	8759 Hen			
Safety (	Glasses	Steel Toe Shoes	Leather ne	r Gloves (as eeded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of</li> <li>If works need to be done to prop, winch boom must be cranked forward till prop is visible.</li> <li>This machine can be turned off by the cannibal system computer, but shall be locked out at breaker.</li> </ol>
the equipment could cause bodily harm.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	Contraction of the second seco			
Lock	Tag	Hasp		

Lock

Hasp

Bef	efore Servicing or Maintenance:							
1.	Notify affected personnel that you intend to lockout or tagout the equipment.	5.	Apply lock and tag on handle switch. *NOTE* Tag shall include date taken out of service,					
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.					
3.	Identify Interchange Mixer 3 knife switch on the southeast side of the Filter Press Building in the left center at the top of the control panel.	6. 7.	Dissipate energy by turning Mixer 3 switch located beside winch boom ON. Return Switch to OFF position.					
4.	De-energize handle switch by turning to OFF position.							

Energy Sources:	12					
Magnitude:	460V					
Energy Isolation Device	Control Panel in Filter Press					
& Location:	Building					
After Servicing or Maintonenaa.						

- After Servicing or Maintenance:

   1. Verify all controls are "off" or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- Make sure all guarding is in place. 3.
- 4. Notify affected personnel that the machine or equipment will be reenergized.
- 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10



Machine:	Interchange	e Mixer 4			Plant:	Wastewater Trea	atment Plant
Area:	North East	l	Jpdated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	N		Cent	anaro Heren			
Safety (	Glasses	Steel Toe Shoes	Leathe n	r Gloves (as eeded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or</li> <li>If works need to be done to prop, winch boom must be cranked forward till prop is visible.</li> <li>This machine can be turned off by the cannibal</li> </ol>		
bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>If works need to be done to prop, winch boom must be cranked forward till prop is visible.</li> <li>This machine can be turned off by the cannibal system computer, but shall be locked out at breaker.</li> </ol>

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

<b>P</b>	Concerned and the second secon			
Lock	Tag	Hasp		

Hasp

Bef	Before Servicing or Maintenance:							
1.	Notify affected personnel that you intend to lockout or tagout the equipment.	5.	Apply lock and tag on handle switch. *NOTE* Tag shall include date taken out of service,					
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.					
3.	Identify Interchange Mixer 4 knife switch on the southeast side of the Filter Press Building in the center of the control panel.	6. 7.	Dissipate energy by turning Mixer 4 switch located beside winch boom ON. Return Switch to OFF position.					
4.	De-energize handle switch by turning to OFF position.							

Energy Sources:	11				
Magnitude:	460V				
Energy Isolation Device	Control Panel in Filter Press				
& Location:	Building				
After Servicing or Meintenenee.					

#### After Servicing or Maintenance:

- Verify all controls are "off" or in neutral position. 1.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be reenergized.
- 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Approvals:

Date: 7/9/10



Machine:	Polymer Mi	xer			Plant:	Wastewater Treatr	nent Plant
Area:	Filter Press	Building	Updated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	A		CENE	2055 			
Safety C	Glasses	Steel Toe Shoes	Leathe ne	r Gloves (as eeded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	2. Use caution, floor may be slippery.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

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		1

Lock

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Bef	Before Servicing or Maintenance:							
1.	Notify affected personnel that you intend to lockout or tagout the equipment.	5.	Apply lock and tag on handle switch. *NOTE* Tag shall include date taken out of service,					
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.					
3. 4.	Identify Polymer Mixer Control panel next to the Mixer. De-energize handle switch by turning to OFF position.	6. 7.	Dissipate energy by turning Mixer, Polymer Feeder, and Disperser switches to ON. Return switches to OFF position.					

Energy Sources:	12					
Magnitude:	460V					
Energy Isolation Device	Control Panel on Polymer Mixer					
& Location:						
After Servicing or M	laintenance:					
1. Verify all controls are "of	ff" or in neutral position.				5.	7 10 14 0
2. Clear machine or equipment of tools, parts, or people.		Prepared by	· · · · · · · · · · · · · · · · · · ·	Date:	//9/10	
<ol> <li>Make sure all guarding is in place.</li> <li>Notify affected personnel that the machine or equipment will be re-</li> </ol>						
		Approvals:				

energized.Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.



Machine:	Return Scre	w Pump 1			Plant:	Wastewater Treatme	ent Plant
Area:	North Centra	al l	Jpdated:	7/9/10			
Personal F	Protective E	quipment:					
5	A	K			and the second se	5N30 8N30 -4	
Safety	Glasses	Steel Toe Rubber Boots	Nitrile Glo	ves (as needed)	Le	ather Gloves (as needed)	Hardhat (as needed)

#### SAFE OPERATING PROCEDURES:

1.	Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard,	2.	Boom truck may be needed when performing work on bottom of auger.
	and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	3.	There is possible bloodborne pathogen contact associated with working around Screw Pump.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	CONCEPTERATION OF THE PARTY OF			
Lock	Tag	Hasp		

#### Before Servicing or Maintenance:

1. 2. 3.	Notify affected personnel that you intend to lockout the equipment. Clear the area and equipment of tools, parts and other materials. Identify Return Screw Pump 1 knife switch in the Influent MCC Building on south control panel on the top right side.	6. 7. 8.	Dissipate or release any stored energy by trying to turn knife switch ON at box located above the motor. Return knife switch to OFF position. If work needs to be done to bottom of auger close gate 1 at the bottom of auger clock wise until closed.
4. 5.	Denergize knife switch by pulling to OFF position. Apply hasp, lock, and tag on knife switch.		
	*NOTE* Tag shall include date taken out of service, person/persons that took out of service, and work being		
	done.		

Energy Sources:	12		
Magnitude:	460V		
Energy Isolation Device & Location:	Control panel in Influent MCC Building		

#### After Servicing or Maintenance:

- 1. Verify all controls are OFF or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be re-energized.
- Remove locks, devices, and tags from energy isolation devices.
   Re-energize or power-up machine by returning energy isolating devices to permute presting position.

devices to normal operating position.

Prepared by:

Date: 7/9/10



Machine:	Return Scre	w Pump 2			Plant:	Wastewater Treatm	ent Plant
Area:	North Centra	al l	Jpdated:	7/9/10			
Personal P	Protective E	quipment:					
5	A	K				5N30 -4- -4-	
Safety	Glasses	Steel Toe Rubber Boots	Nitrile Glo	ves (as needed)	Le	ather Gloves (as needed)	Hardhat (as needed)

#### SAFE OPERATING PROCEDURES:

1.	Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard,	2.	Boom truck may be needed when performing work on bottom of auger.
	and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	3.	There is possible bloodborne pathogen contact associated with working around Screw Pump.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	CONCEPTERATION OF THE PARTY OF			
Lock	Tag	Hasp		

#### Before Servicing or Maintenance:

1. Notify affected personnel that you intend to lockout the equipment. 6. Dissipate or release any stored energy by trying to turn knife switch ON at box located above the motor. 2. Clear the area and equipment of tools, parts and other 7. Return knife switch to OFF position. materials. 3. Identify Return Screw Pump 2 knife switch in the 8. If work needs to be done to bottom of auger close Influent MCC Building on south control panel on the gate 2 at the bottom of auger clock wise until closed. bottom right side. 4. Denergize knife switch by pulling to OFF position. 5. Apply hasp, lock, and tag on knife switch. \*NOTE\* Tag shall include date taken out of service, person/persons that took out of service, and work being done.

Energy Sources:	12		
Magnitude:	460V		
Energy Isolation Device & Location:	Control panel in Influent MCC Building		

#### After Servicing or Maintenance:

- 1. Verify all controls are OFF or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be re-energized.
- Remove locks, devices, and tags from energy isolation devices.
   Re-energize or power-up machine by returning energy isolating devices to recently provide a section.
  - devices to normal operating position.

Date: 7/9/10

Prepared by: \_\_\_\_\_\_ Approvals: \_\_\_\_\_



Machine:	Return Scre	w Pump 3			Plant:	Wastewater Treatme	ent Plant
Area:	North Centra	al l	Jpdated:	7/9/10			
Personal F	Protective E	quipment:					
5	A	K				8N99) 8N99 -4	
Safety	Glasses	Steel Toe Rubber Boots	Nitrile Glo	ves (as needed)	Le	eather Gloves (as needed)	Hardhat (as needed)

#### SAFE OPERATING PROCEDURES:

1.	Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard,	2.	Boom truck may be needed when performing work on bottom of auger.
	and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	3.	There is possible bloodborne pathogen contact associated with working around Screw Pump.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	CONCEPTERATION OF THE PARTY OF			
Lock	Tag	Hasp		

#### Before Servicing or Maintenance:

1.	Notify affected personnel that you intend to lockout the equipment.	6.	Dissipate or release any stored energy by trying to
2.	Clear the area and equipment of tools, parts and other materials.	7.	turn knife switch ON at box located above the motor. Return knife switch to OFF position.
3.	Identify Return Screw Pump 3 knife switch in the Influent MCC Building on north control panel on the bottom left side.	8.	If work needs to be done to bottom of auger close gate 3 at the bottom of auger clock wise until closed.
4. 5.	Denergize knife switch by pulling to OFF position. Apply hasp, lock, and tag on knife switch. *NOTE* Tag shall include date taken out of service, person/persons that took out of service, and work being done.		

Energy Sources:	12		
Magnitude:	460V		
Energy Isolation Device & Location:	Control panel in Influent MCC Building		

#### After Servicing or Maintenance:

- 1. Verify all controls are OFF or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be re-energized.
- Remove locks, devices, and tags from energy isolation devices.
   Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10



Machine:	Rotomat So	creen 1			Plant:	Wastewater Treatr	ment Plant
Area:	North Centr	ral	Updated: 7	//9/10			
Personal	Protectiv	e Equipment:					
5	A		CENE				
Safety (	Glasses	Steel Toe Shoes	Leather ( nee	Gloves (as ded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>Rotomat Screen 1 cannot be locked out without locking out Rotomat Screen 2 also.</li> </ol>

#### LOCKOUT PROCEDURE:

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(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

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	the characteristic state of th	::		

Lock

Hasp

вет	ore Servicing or Maintenance:		
1.	Notify affected personnel that you intend to lockout or tagout the equipment.	5.	Apply tag on button switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Rotomat Screen 1 button switch on control panel 3 feet south of motor.		
4.	De-energize switch by turning to OFF position.		
1			

Energy Sources:	12			
Magnitude:	460V			
Energy Isolation Device & Location:	Control panel in beside Rotomat Screens			
After Servicing or Maintenance:				

- 1. Verify all controls are "off" or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be reenergized.
- 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10



Machine:	Rotomat So	creen 2			Plant:	Wastewater Treatr	ment Plant
Area:	North Centr	ral	Updated: 7/9/10				
Personal	Protectiv	e Equipment:					
5	A		CENE				
Safety (	Glasses	Steel Toe Shoes	Leather ( nee	Gloves (as eded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>Rotomat Screen 2 cannot be locked out without locking out Rotomat Screen 1 also.</li> </ol>
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#### LOCKOUT PROCEDURE:

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(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Tag

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3	Understanding and a second sec			

Lock

Hasp

Bef	ore Servicing or Maintenance:		
1.	Notify affected personnel that you intend to lockout or tagout the equipment.	5.	Apply tag on button switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Rotomat Screen 2 button switch on control panel 3 feet south of motor.		
4.	De-energize switch by turning to OFF position.		

Energy Sources:	12			
Magnitude:	460V			
Energy Isolation Device	Control panel beside Rotomat			
& Location:	Screens			
After Servicing or Maintenance:				

- Verify all controls are "off" or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be reenergized.
- 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10



Machine:	Screw Com	pactor			Plant:	Wastewater Treatr	ment Plant
Area:	Filter Press	Building	Jpdated:	7/9/10			
Personal	Protectiv	e Equipment:					
5	A		CENE The CENE	ana a			
Safety (	Glasses	Steel Toe Shoes	Leathe n	r Gloves (as eeded)	Nit	rile Gloves (as needed)	

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>Use caution when machine is ON due to the turning of the drum.</li> <li>This machine can be turned off by the cannibal system computer, but shall be locked out at breaker.</li> </ol>
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## LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

Lock	Tag	Hasp		

Hasp

Bef	ore Servicing or Maintenance:		
1.	Notify affected personnel that you intend to lockout or tagout the equipment.	5.	Apply lock and tag on handle switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Screw Compactor knife switch on the southeast side of the filter Press Building in the lower left of the control panel.	6.	Dissipate energy by turning Screw Compactor knife switch ON located along north wall 10 feet from compactor.
4.	De-energize handle switch by turning to OFF position.	7.	Return Switch to OFF position.

Energy Sources:	11				
Magnitude:	460V				
Energy Isolation Device	Control Panel in Filter Press				
& Location:	Building				
After Servicing or Maintonance:					

# After Servicing or Maintenance: 1. Verify all controls are "off" or in neutral position.

- 2. Clear machine or equipment of tools, parts, or people.
- Make sure all guarding is in place. 3.
- 4. Notify affected personnel that the machine or equipment will be reenergized.
- 5. Remove locks, devices, and tags from energy isolation devices.

6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10



Machine:	Screw Pump	<i>#</i> 1			Plant:	Wastewater Treatme	ent Plant
Area:	West	(	Jpdated:	7/9/10			
Personal F	rotective E	quipment:					
5	D	K				CENE 	
Safety (	Glasses	Steel Toe Rubber Boots	Nitrile Glo	ves (as needed)	Le	eather Gloves (as needed)	Hardhat (as needed)

#### SAFE OPERATING PROCEDURES:

1.	Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard,	2.	Boom truck may be needed when performing work on bottom of auger.
	and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	3.	There is possible bloodborne pathogen contact associated with working around Screw Pump.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	CALCULATION OF A CONTROL OF A C			
Lock	Tag	Hasp		

#### Before Servicing or Maintenance:

1. Notify affected personnel that you intend to lockout the equipment.

- 2. Clear the area and equipment of tools, parts and other materials.
- 3. Identify Screw Pump 1 knife switch in the Influent MCC Building on north control panel on the right side.
- 4. Denergize knife switch by pulling to OFF position.

 Apply hasp, lock, and tag on knife switch.
 \*NOTE\* Tag shall include date taken out of service, person/persons that took out of service, and work being done.

- 6. Dissipate or release any stored energy by trying to turn knife switch ON at box located above the motor.
- 7. Return knife switch to OFF position.
- 8. If work needs to be done to bottom of auger close gate 1 at the bottom of auger clock wise until closed.

Energy Sources:	12		
Magnitude:	460V		
Energy Isolation Device & Location:	Control panel in Influent MCC Building		

#### After Servicing or Maintenance:

- 1. Verify all controls are OFF or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be re-energized.
- 5. Remove locks, devices, and tags from energy isolation devices.
- 6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10



Machine:	Screw Pump	o #2			Plant:	Wastewater Treatme	ent Plant
Area:	West	(	Jpdated:	7/9/10			
Personal P	rotective E	quipment:					
5	A	K				44- -44- -44-	
Safety 0	Glasses	Steel Toe Rubber Boots	Nitrile Glo	ves (as needed)	Le	eather Gloves (as needed)	Hardhat (as needed)

#### SAFE OPERATING PROCEDURES:

1.	Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard,	2.	Boom truck may be needed when performing work on bottom of auger.
	and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	3.	There is possible bloodborne pathogen contact associated with working around Screw Pump.

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	CALCED CALL OF THE PARTY OF THE			
Lock	Tag	Hasp		

#### Before Servicing or Maintenance:

1. Notify affected personnel that you intend to lockout the equipment.

- 2. Clear the area and equipment of tools, parts and other materials.
- 3. Identify Screw Pump 2 knife switch in the Influent MCC Building on north control panel on the right side.
- 4. Denergize knife switch by pulling to OFF position.

 Apply hasp, lock, and tag on knife switch.
 \*NOTE\* Tag shall include date taken out of service, person/persons that took out of service, and work being done.

- Dissipate or release any stored energy by trying to turn knife switch ON at box located above the motor.
   Deturn knife switch to OFF activities
- 7. Return knife switch to OFF position.
- 8. If work needs to be done to bottom of auger close gate 2 at the bottom of auger clock wise until closed.

Energy Sources:	11		
Magnitude:	460V		
Energy Isolation Device & Location:	Control panel in Influent MCC Building		

#### After Servicing or Maintenance:

- 1. Verify all controls are OFF or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be re-energized.
- 5. Remove locks, devices, and tags from energy isolation devices.
- 6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Prepared by:

Date: 7/9/10



Machine:	Screw Pump	o #3			Plant:	Wastewater Treatme	ent Plant
Area:	West	l	Jpdated:	7/9/10			
Personal P	rotective E	quipment:					
5	A	K				44- -44- -44-	
Safety 0	Glasses	Steel Toe Rubber Boots	Nitrile Glo	ves (as needed)	Le	eather Gloves (as needed)	Hardhat (as needed)

#### SAFE OPERATING PROCEDURES:

<u></u>				
1.	Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard,	2.	Boom truck may be needed when performing work on bottom of auger.	
	and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.	3.	There is possible bloodborne pathogen contact associated with working around Screw Pump.	

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	Example 2 and 2 an			
Lock	Tag	Hach		

Lock

Тад

Hasp

#### Before Servicing or Maintenance:

1. Notify affected personnel that you intend to lockout the equipment.

- 2. Clear the area and equipment of tools, parts and other materials.
- 3. Identify Screw Pump 3 knife switch in the Influent MCC Building on south control panel in the center.
- 4. Denergize knife switch by pulling to OFF position.

 Apply hasp, lock, and tag on knife switch.
 \*NOTE\* Tag shall include date taken out of service, person/persons that took out of service, and work being done.

- 6. Dissipate or release any stored energy by trying to turn knife switch ON at box located above the motor.
- 7. Return knife switch to OFF position.
- 8. If work needs to be done to bottom of auger close gate 3 at the bottom of auger clock wise until closed.

Date: 7/9/10

Energy Sources:	11		
Magnitude:	460V		
Energy Isolation Device & Location:	Control panel in Influent MCC Building		

Prepared by:

Approvals:

#### After Servicing or Maintenance:

- 1. Verify all controls are OFF or in neutral position.
- 2. Clear machine or equipment of tools, parts, or people.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be re-energized.
- 5. Remove locks, devices, and tags from energy isolation devices.
- 6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.



Machine:	Sludge Pur	np 1 of Sludge Handling Building	n Undated: 7/9/10	Plant:	Wastewater Treatment Plant
Personal	Protectiv	e Equipment:	<u> </u>		
5	D		BNSD BNSD		
Safety (	Glasses	Steel Toe Shoes	Leather Gloves (as need	ed)	Hearing Protection (as needed)

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>There is possible bloodborne pathogen contact associated with working around Sludge Pump.</li> <li>Hearing protection is required if blowers, located on the first floor, are on.</li> </ol>

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	Conception of the second secon			
Lock	Tag	Hasp		

вет	ore Servicing or Maintenance:		
1.	Notify affected personnel that you intend to lockout the equipment.	5.	Apply hasp, lock, and tag on knife switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Sludge Pump 1 knife switch on the north side of the Sludge Handling Building in the left center of the control panel.	6. 7.	Dissipate or release any stored energy by trying to turn knife switch ON at box located above the motor. Return knife switch to OFF position.
4.	Denergize knife switch by pulling to OFF position.		

Energy Sources:	11		
Magnitude:	460V		
Energy Isolation Device & Location:	Control Panel in Sludge Handling Building		
After Servicing or M	aintenance:		
<ol> <li>Verify all controls are "of</li> <li>Clear machine or equipm</li> </ol>	f" or in neutral position. ent of tools, parts, or people.	Prepared by:	Date: 7/9/10

- - Make sure all guarding is in place. Notify affected personnel that the machine or equipment will be re-3.
  - 4. energized.
  - 5. Remove locks, devices, and tags from energy isolation devices.
  - Re-energize or power-up machine by returning energy isolating 6. devices to normal operating position.



Machine:	Sludge Pum	ip 2		Plant:	Wastewater Treatment Plant
Area:	Downstairs	of Sludge Handling Buildi	ng Updated: 7/9/10		
Personal	Protective	Equipment:			
5	D		BN30 Harris		
Safety C	Slasses	Steel Toe Shoes	Leather Gloves (as neede	ed)	Hearing Protection (as needed)

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>There is possible bloodborne pathogen contact associated with working around Sludge Pump.</li> <li>Hearing protection is required if blowers, located on the first floor, are on.</li> <li>This machine has two lock out points, that both need to be de-energized.</li> </ol>

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

<b>A</b>	CALCULATION OF THE PARTY OF THE			
Lock	Tag	Hasp		

Lock

Hasp

Before	Servicing	or	Maintenance:
	<u> </u>	•••	

1.	Notify affected personnel that you intend to lockout the	5.	Apply hasp, lock, and tag on knife switch.
	equipment.		*NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Sludge Pump 2 knife switch on the north side of the Sludge Handling Building in the bottom left of the control panel.	6.	Dissipate or release any stored energy by trying to turn knife switch, labeled Sludge Pump 2, ON at variable control box located at the bottom of stairs on
4.	Denergize knife switch by pulling to OFF position.		left.
		7.	Return knife switch to OFF position.
		8.	Also dissipate or release any stored energy by trying
		_	to turn knile switch ON located above the motor.
1		9.	Return knite switch to OFF position.

Energy Sources:	11				
Magnitude:	460V				
Energy Isolation Device & Location:	Control Panel in Sludge Handling Building				

Prepared by:

Approvals:

Date: 7/9/10

#### After Servicing or Maintenance:

- Verify all controls are "off" or in neutral position. 1.
- Clear machine or equipment of tools, parts, or people. 2.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be re-energized.
- Remove locks, devices, and tags from energy isolation devices. 5.
- 6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.



Machine:	Sludge Pum	ip 3		F	Plant:	Wastewater Treatment Plant
Area:	Downstairs	of Sludge Handling Buildir	ng Updated:	7/9/10		
Personal	Protective	Equipment:				
5	N		CENT			
Safety C	lasses	Steel Toe Shoes	Leather Glove	s (as needed)		Hearing Protection (as needed)

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>There is possible bloodborne pathogen contact associated with working around Sludge Pump.</li> <li>Hearing protection is required if blowers, located on the first floor, are on.</li> <li>This machine has two lock out points, that both need to be de-energized.</li> </ol>

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

<b>A</b>				
Lock	Tag	Hasp		

Lock

Hasp

Bef	Before Servicing or Maintenance:						
1.	Notify affected personnel that you intend to lockout the	5.	Apply hasp, lock, and tag on knife switch.				
	equipment.		*NOTE* Tag shall include date taken out of service,				
2.	Clear the area and equipment of tools, parts and other		person/persons that took out of service, and work being				
	materials.		done.				
3.	Identify Sludge Pump 3 knife switch on the north side of	6.	Dissipate or release any stored energy by trying to				
	the Sludge Handling Building in the right center of the		turn knife switch, labeled Sludge Pump 3, ON at				
	control panel.		variable control box located at the bottom of stairs on				
4.	Denergize knife switch by pulling to OFF position.		left.				
		7.	Return knife switch to OFF position.				
		8.	Also dissipate or release any stored energy by trying				
			to turn knife switch ON located above the motor.				
		9.	Return knife switch to OFF position.				

Energy Sources:	12		
Magnitude:	460V		
Energy Isolation Device & Location:	Control Panel in Sludge Handling Building		

Prepared by:

#### After Servicing or Maintenance:

- Verify all controls are "off" or in neutral position. 1.
- Clear machine or equipment of tools, parts, or people. 2.
- 3. Make sure all guarding is in place.
- 4. Notify affected personnel that the machine or equipment will be re-energized.
- 5. Remove locks, devices, and tags from energy isolation devices.
- 6. Re-energize or power-up machine by returning energy isolating devices to normal operating position.

Approvals:			

Date: 7/9/10



Machine:	Sludge Pur	np 4		Plant:	Wastewater Treatment Plant
Area:	Downstairs	of Sludge Handling Building	g Updated: 7/9/10		
Personal	Protectiv	e Equipment:			
5	D		ANSO ANSO		
Safety C	Slasses	Steel Toe Shoes	Leather Gloves (as need	led)	Hearing Protection (as needed)

#### SAFE OPERATING PROCEDURES:

<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> <li>There is possible bloodborne pathogen contact associated with working around Sludge Pump.</li> <li>Hearing protection is required if blowers, located on the first floor, are on.</li> </ol>		
	<ol> <li>Always Lock, Tag, and Try to control hazardous energy sources prior to performing maintenance or service on this machine, when removing or bypassing a guard, and/or under any circumstance where the unexpected start-up or energization of the equipment could cause bodily harm.</li> </ol>	<ol> <li>There is possible bloodborne pathogen contact associated with working around Sludge Pump.</li> <li>Hearing protection is required if blowers, located on the first floor, are on.</li> </ol>

#### LOCKOUT PROCEDURE:

(Use this procedure before any servicing or maintenance activities are performed where the expected energization, start up, or release of stored energy may cause injury. (i.e. repairs, set-up, clearing parts, etc.)

#### Lock Out/Tag Out Equipment Needed:

	Conception of the second secon			
Lock	Tag	Hasp		

Bet	ore Servicing or Maintenance:		
1.	Notify affected personnel that you intend to lockout the equipment.	5.	Apply hasp, lock, and tag on knife switch. *NOTE* Tag shall include date taken out of service,
2.	Clear the area and equipment of tools, parts and other materials.		person/persons that took out of service, and work being done.
3.	Identify Sludge Pump 4 knife switch on the north side of the Sludge Handling Building in the bottom right of the control panel.	6. 7.	Dissipate or release any stored energy by trying to turn knife switch ON at box located above the motor. Return knife switch to OFF position.
4.	Denergize knife switch by pulling to OFF position.		

Energy Sources:	M				
Magnitude:	460V				
Energy Isolation Device & Location:	Control Panel in Sludge Handling Building				
After Servicing or Maintenance:					
<ol> <li>Verify all controls are "off" or in neutral position.</li> <li>Clear machine or equipment of tools, parts, or people.</li> <li>Make sure all guarding is in place.</li> <li>Notify affected personnel that the machine or equipment will be re-</li> </ol>		Prepared by: Approvals:		Date:	7/9/10

Notify affected personnel that the machine or equipment will be reenergized.

5. Remove locks, devices, and tags from energy isolation devices.

Re-energize or power-up machine by returning energy isolating 6. devices to normal operating position.