



**WOLLASTON ALLOYS INC.**  
A CPP COMPANY



June 17, 2013

U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Attn: Document Control Desk

Subject: Report of Potential Substantial Safety Hazard in accordance with Title 10  
Code of Federal Regulations, Part 21

Wollaston Alloys, Inc. is submitting this report as an update to the interim report submitted on May 17, 2013 resulting from product concerns identified by Curtiss Wright EMD during the investigation of an impeller blade failure as noted in Curtiss Wright EMD's notification to the Nuclear Regulatory Commission ("NRC"), dated May 3, 2013. This investigation did not include the Curtiss Wright impeller failure since it is not considered a reportable incident, but addresses the identified concerns with regards to other product supplied to domestic users. The previously submitted interim report requested an additional 30 days to identify basic components supplied under the requirements of 10 CFR Part 21 and to determine if there is evidence that a defect or failure to comply exists.

(i) *Name and address of individual or individuals informing the Commission*

Stephen M. Grief  
Quality Manager  
Wollaston Alloys, Inc.  
205 Wood Rd  
Braintree, MA 02184

(ii) *Identification of the facility, activity, or basic component supplied for such facility or activity within the United States which fails to comply or contains a defect.*

Wollaston Alloys, Inc. determined that the purchase orders listed in attachments 1 thru 6 were the only cases in which Wollaston Alloys, Inc. supplied components to which the requirements of 10 CFR Part 21 applied. We conducted a review of all records pertaining to those purchase orders and found no evidence of a defect or failure to comply.

WOLLASTON ALLOYS, INC.  
205 WOOD RD T: 781-848-3333  
BRAintree, MA 02184 F: 781-848-3993  
WWW.WOLLASTONALLOYS.COM

TE19  
MLR



- (iii) *Identification of the firm constructing the facility or basic component, which fails to comply or contain a defect.*

Wollaston Alloys, Inc.  
205 Wood Rd  
Braintree, Ma 02184

- (iv) *Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.*

Process concerns identified by Curtiss Wright.

- a) Insufficient filler material control as evidenced by mismatched filler identified in the weld overlays on the separated impeller piece as identified by CW EMD.
  - b) Weld process concerns as evidenced by indications of use of an unapproved welding process identified by the investigation conducted by CW-EMD.
  - c) Insufficient pass down of contract requirements to shop floor operations as evidenced by more than one post weld heat treatment cycle used on CW EMD impeller SN 3021 when only one post weld heat treatment cycle was authorized by contract documents.
  - d) Penetrant examination performed by Wollaston Alloys, Inc. did not identify surface flaws in the casting for impeller Serial Number 3021. However, using the Wollaston Alloys, Inc. procedure, CW EMD was able to identify flaws that were determined to be unacceptable.
  - e) Record control concerns as evidenced by:
    - 1) Updated records submitted using identical record number with no indication of correction annotated on the record.
    - 2) Incomplete records packages submitted to CW EMD with product and no apparent mechanism for assuring all records are included or delivered.
- (v) *The date on which the information of such defect or failure to comply was obtained.*

March 13, 2013.



- (vi) *In the case of a basic component which contains a defect or failure to comply, the number and location of these components in use at, supplied for, or may be supplied for, manufactured, or being manufactured for one or more facilities or activities subject to the regulations in this part.*

Wollaston Alloys Inc. has identified the customers and the purchase orders on which it supplied parts subject to the requirements of 10 CFR Part 21. Wollaston Alloys, Inc. provided written notification to those customers detailing the concerns, the results of Wollaston's investigation and information regarding each individual purchase order on which basic components were supplied. Records of those orders were reviewed and do not indicate the presence of a defect or failure to comply. See attachments 1 thru 6 for listing of orders for each individual customer.

The organizations to which basic components were supplied are as follows:

Aerofin  
4621 Murray Place  
Lynchburg, VA 24502

Dresser-Rand Company  
Wellsville Operations  
37 Coats St.  
Wellsville, NY 14895

Enertech  
2950 E. Birch St.  
Brea, CA 92821

Emerson Process Management  
205 South Center St.  
Marshalltown, IA, 50158-2823

Flowserve Pump Division  
Flowserve US Inc.  
2300 East Vernon Ave.  
Vernon, CA 90058

Weir Valves & Controls USA, Inc.  
29 Old Right Rd.  
Ipswich, MA 01938



**WOLLASTON ALLOYS INC.**  
*A CPP COMPANY*



We understand the Curtiss Wright impellers manufactured by Wollaston Alloys, Inc. are being exported to the Peoples Republic of China and will not be used in any nuclear facility in the United States.

*(vii) The corrective action which has been, is being, or will be taken, the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.*

Regarding the specific concerns identified,

**Items a & b:** Wollaston has instituted additional process controls to assure there is no co-mingling of filler metal or that a welding procedure/process other than that specified for the specific order is used. Wollaston has also conducted a review of its weld wire storage and found no co-mingling in any of the open containers of filler material.

**Item c:** Regarding insufficient pass down of contract requirements and the use of multiple post weld heat treat cycles, Wollaston is reviewing its order review process to determine what additional controls may be implemented.

**Item d:** Regarding concerns on liquid penetrant testing evaluation, personnel have been re-instructed on requirements and acceptance. We have brought in our nondestructive testing (NDT) Level III to witness the performance and evaluation of liquid penetrant testing and will continue to do so at an increased frequency. The NDT Level III is responsible for training and examining NDT level I and Level II personnel for certification and the review and approval of procedures. Wollaston Alloys, Inc. personnel responsible for performing liquid penetrant testing and evaluation are qualified as NDT Level II. Liquid penetrant testing procedures have been revised to provide more clear and concise instruction. Procedure changes have been reviewed with involved personnel.

**Item e:** Record control concerns, Wollaston is reviewing its record control procedures, making sure all record requirements are properly identified on the shop documentation and that revised documents are properly identified.

**WOLLASTON ALLOYS, INC.**  
205 WOOD RD                      T: 781-848-3333  
BRAintree, MA 02184        F: 781-848-3993  
[WWW.WOLLASTONALLOYS.COM](http://WWW.WOLLASTONALLOYS.COM)



**WOLLASTON ALLOYS INC.**  
*A CPP COMPANY*



*(viii) Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.*

Wollaston Alloys, Inc. has reviewed all records of orders supplied to the customers listed in section (vi) of this report and has found no indication of the presence of a defect or failure to comply, but because the parts are no longer in our control, Wollaston Alloys, Inc. has provided each of those customers the results of our investigation and a list detailing items supplied. We believe that all the necessary information has been provided and unless there is a specific request by the NRC for additional information this will complete the filing.

*(ix) In the case of an early site permit, the entities to whom an early site permit was transferred.*

Not applicable

Sincerely,

Stephen M. Grief  
Quality Manager  
Wollaston Alloys, Inc.

**Attachments:**

1. List of purchase orders on which basic components were supplied to: Aerofin, 4621 Murray Place, Lynchburg, VA 24502
2. List of purchase orders on which basic components were supplied to Dresser-Rand Company, Wellsville Operations, 37 Coats St. Wellsville, NY 14895
3. List of purchase orders on which basic components were supplied to Enertech, 2950 E. Birch St, Brea, CA 92821
4. List of purchase orders on which basic components were supplied to Emerson Process Management, 205 South Center St., Marshalltown, IA, 50158-2823
5. List of purchase orders on which basic components were supplied to Flowserve Pump Division, Flowserve US Inc., 2300 East Vernon Ave, Vernon, CA 90058
6. List of purchase orders on which basic components were supplied to Weir Valves & Controls USA, Inc., 29 Old Right Rd. Ipswich, MA 01938

**WOLLASTON ALLOYS, INC.**  
205 WOOD RD T: 781-848-3333  
BRAintree, MA 02184 F: 781-848-3993  
**WWW.WOLLASTONALLOYS.COM**

Attachment 1  
Aerofin Purchase Orders to Wollaston Alloys, Inc.

Customer	Order Date	Purchase Order	WA Order Number	Part	Pattern	Qty
Aerofin Heat Transfer Products	12/13/2010	050261-00	266949-1	CASING	PN7020-P2	1
Aerofin Heat Transfer Products	12/13/2010	050261-00	266949-2	COVER	PN7021	1
Aerofin Heat Transfer Products	12/13/2010	050261-00	266949-3	BEARING FRAME	PC7204-P2	1

Attachment 2

Dresser - Rand Wellsville Operations Purchase Orders to Wollaston Alloys, Inc.

Customer	Order Date	Purchase Order	WA Order Number	Part	Pattern	Qty
Dresser-Rand Company	3/25/2010	202178	265519-1	VALVE BODY	73621-901	1
Dresser-Rand Company	1/28/2011	221997	267208-1	BODY	T67016A02	1
Dresser-Rand Company	5/10/2011	225831	267779-1	BODY	T67016A02	1
Dresser-Rand Company	6/6/2011	226843	267966-1	BODY	T67016A02	1
Dresser-Rand Company	11/15/2011	232923	268989-1	BODY	T67016A02	1

Attachment 3  
Enertech Purchase Orders to Wollaston Alloys, Inc.

Customer	Order Date	Purchase Order	WA Order Number	Part	Pattern	Qty
Enertech	11/8/2006	114843	256592-1	CASING - UPPER HALF	69948	2
Enertech	11/8/2006	114843	256592-2	CASING - LOWER HALF	69949	2
Enertech	10/25/2007	115813	259580-1	CASING; UPPER HALF	54977	2
Enertech	10/25/2007	115813	259580-2	CASING; LOWER HALF	54978	2
Enertech	6/6/2008	116363	261421-1	CASING	56203	2
Enertech	1/15/2009	117080	263058-1	CASING	56203	2
Enertech	1/21/2009	117102	263069-1	CASING	56203	2
Enertech	4/22/2009	117333	263670-1	STUFFING BOX COVER	56210	2
Enertech	7/9/2009	117546	264198-1	STUFFING BOX COVER	56210	1
Enertech	8/18/2009	117633	264321-1	GLAND, HALF	55647	4
Enertech	12/8/2009	117909	264916-1	COVER, SEAL CHAMBER	56212	1
Enertech	12/8/2009	117909	264916-2	PACKING GLAND	63225	2
Enertech	12/8/2009	117909	264916-3	COVER, SEAL CHAMBER	56212	2
Enertech	12/10/2009	117928	264927-1	CASING	56203	2
Enertech	12/10/2009	117928	264927-2	STUFFING BOX COVER	56210	2
Enertech	12/30/2009	117964	265022-1	STUFFING BOX COVER	56210	1
Enertech	1/5/2010	117974	265060-1	BEARING FRAME	1E702	1
Enertech	5/12/2010	118258	265773-1	6x8-17 LOWER HALF CASING 150# FLANGES	54546	2
Enertech	5/12/2010	118258	265773-2	CASING - UPPER HALF	54550	2
Enertech	6/25/2010	118349	265993-2	FRAME	2E123	4
Enertech	7/22/2010	118408	266102-1	1x2-10 CASING	56382	4
Enertech	7/22/2010	118408	266102-2	10" STUFFING BOX COVER 8 VANES	68758	4
Enertech	7/22/2010	118408	266102-3	10" ADAPTER	2E192	4
Enertech	8/27/2010	118506	266314-1	GLAND, HALF	55647	4
Enertech	9/1/2010	118520	266360-1	STUFFING BOX COVER	56210	2
Enertech	12/20/2010	118800	267020-2	2.75x2.75x9.5 TEST BLOCK	D9404D	4
Enertech	12/20/2010	118800	267020-3	2.75x2.75x9.5 TEST BLOCK	D9404D	2
Enertech	3/24/2011	119002	267539-1	GLAND, HALF	55647	4
Enertech	6/16/2011	119329	268037-1	GLAND, HALF	55647	4
Enertech	9/26/2011	119620	268652-1	1x2-10 CASING	54260	4
Enertech	9/26/2011	119620	268652-2	10" ADAPTER	2E192	4
Enertech	9/26/2011	119620	268652-3	10" STUFFING BOX COVER 8 VANES	68758	4
Enertech	9/26/2011	119620	268652-4	FRAME	2E123	4
Enertech	9/26/2011	119620	268652-5	2.75x2.75x9.5 TEST BLOCK	D9404D	4
Enertech	3/1/2012	120233	269608-1	1x1.5-6 CASING 3196	56216	1
Enertech	3/1/2012	120233	269608-3	SEAL CHAMBER COVER - MODEL 3196	68755	1

Attachment 3  
Enertech Purchase Orders to Wollaston Alloys, Inc.

Customer	Order Date	Purchase Order	WA Order Number	Part	Pattern	Qty
Enertech	3/1/2012	120233	269608-5	BEARING FRAME	2E122	1
Enertech	6/6/2012	120657	270178-1	LOWER CASING	56697	1
Enertech	6/6/2012	120657	270178-2	UPPER CASING	56403	1
Enertech	8/2/2012	120879	270545-1	GLAND, HALF	55647	4
Enertech	3/12/2013	121636	271866-1	GLAND, HALF	55647	4

Attachment 4  
Emerson Process Management/Fisher Controls Purchase Orders to Wollaston Alloys, Inc.

Customer	Order Date	Purchase Order	WA Order Number	Part	Pattern	Qty
Emerson Process Management	5/8/2006	71-17087	254998-1	6" DISC	2106-401	1
Emerson Process Management	7/10/2009	4115005762	264133-1	10" 150 S BODY - SPECIAL MOUNTING	1110-319-M	4
Emerson Process Management	7/10/2009	4115005762	264133-1	10" 150 S BODY - SPECIAL MOUNTING	1110-319-M	3
Emerson Process Management	7/10/2009	4115005762	264133-2	10" 150 S BODY - SPECIAL MOUNTING	1110-319-M	3
Emerson Process Management	7/24/2009	4115006075	264215-1	4" LUG BODY	MH-019	7
Emerson Process Management	7/24/2009	4115006075	264215-2	4" 150# DISC	MH-031	7
Emerson Process Management	7/29/2009	4115006078	264234-1	2" VALVE BODY TYPE 8510	GBA (#2)	5
Emerson Process Management	7/29/2009	4115006078	264234-2	2" VALVE BODY TYPE 8510	GBA (#2)	4
Emerson Process Management	7/29/2009	4115006078	264234-3	2" VALVE BODY TYPE 8510	GBA (#2)	6
Emerson Process Management	11/4/2009	4115007709	264734-1	6" DISC	2106-401	3
Emerson Process Management	11/4/2009	4115007709	264734-2	300# WAFER BODY	1006-401	3
Emerson Process Management	12/8/2009	4115008396	264913-1	4" 150# DISC	MH-031	4
Emerson Process Management	12/8/2009	4115008396	264913-2	4" 150# DISC	MH-031	2
Emerson Process Management	1/5/2010	4115008611	265030-1	10" 150 S BODY - SPECIAL MOUNTING	1110-319-M	5
Emerson Process Management	2/1/2013	4115009270	265214-1	4" LUG BODY	MH-019	6
Emerson Process Management	3/12/2010	4115010146	265443-1	4" LUG BODY	MH-019	1
Emerson Process Management	5/6/2010	4115011609	265755-1	300# WAFER BODY	1006-401	2
Emerson Process Management	12/6/2010	4116099280	266929-1	10" DISC	G21644	1
Emerson Process Management	10/2/2012	4115026027	270912-1	2" VALVE BODY TYPE 8510	GBA (#2)	1
Fisher Controls Int'l CT	11/1/2002	192761	222602-10	4" DISC	2104-405CCA	6
Fisher Controls Int'l CT	11/1/2002	192762	222603-10	4" DISC	2104-405CCA	6
Fisher Controls Int'l CT	11/1/2002	192760	222605-10	4" - WAFER BODY	1004-316ECA	6
Fisher Controls Int'l CT	11/21/2002	194250	222742-10	18" - 150 DISC	2118-301ECA	1
Fisher Controls Int'l CT	11/25/2002	193291	222759-10	16" DISC	2116-301JCA	1
Fisher Controls Int'l CT	11/26/2002	193294	222773-10	16" - 150 WAFER BODY	GEG-A	1
Fisher Controls Int'l CT	3/3/2003	199327	230461-10	6" DISC	2106-401BCA	3
Fisher Controls Int'l CT	5/16/2003	203851	231063-10	6" DISC	2106-401CCA	2
Fisher Controls Int'l CT	5/16/2013	203850	231064-10	WAFER BODY - 300#	1006-401ACA	2
Fisher Controls Int'l CT	6/3/2003	204797	231197-10	16" - 150 WAFER BODY	GEG-A	1
Fisher Controls Int'l CT	6/4/2003	204798	231211-10	16" DISC	2116-301JCA	1
Fisher Controls Int'l CT	9/5/2003	210877	231909-10	6" DISC	2106-401BCA	2
Fisher Controls Int'l CT	9/16/2003	211164	232015-10	20" DISC	2120-301LCA	1
Fisher Controls Int'l CT	10/6/2003	211705	232114-10	4" DISC	2104-405CCA	1
Fisher Controls Int'l CT	10/2/2003	211762	232132-10	14" DISC	2114-301JCA	1
Fisher Controls Int'l CT	10/2/2003	211760	232133-10	14" 150 BODY	1014-301DCA	1
Fisher Controls Int'l CT	3/1/2005	132701	250632-10	3" DISC	2103-401DCA	1
Fisher Controls Int'l Marshalltown	1/31/2007	132380	240870-10	8" DISC	2108-301	1
Fisher Controls Int'l Marshalltown	6/16/2004	132395	241153-10	16" 150 WAFER BODY	GEG-A	1
Fisher Controls Int'l Marshalltown	11/29/2004	132560	242656-10	6" DISC CL150 & 300	2106-408CCA	4
Fisher Controls Int'l Marshalltown	1/6/2005	132634	250089-10	10" DISC	2110-308	1
Fisher Controls Int'l Marshalltown	1/6/2005	132633	250090-10	10" BODY	1010-333KCA	1

Attachment 4  
Emerson Process Management/Fisher Controls Purchase Orders to Wollaston Alloys, Inc.

Customer	Order Date	Purchase Order	WA Order Number	Part	Pattern	Qty
Fisher Controls Int'l Marshalltown	1/6/2005	132643	250180-10	14" 150 BODY	1014-301DCA	1
Fisher Controls Int'l Marshalltown	1/6/2005	132642	250181-10	14" DISC	2114-301JCA	1
Fisher Controls Int'l Marshalltown	3/23/2005	132729	250917-10	3" DISC	2103-401DCA	1
Fisher Controls Int'l Marshalltown	4/14/2005	132741	251020-10	42" 150 BODY	HYJ-M	1
Fisher Controls Int'l Marshalltown	6/13/2005	132741	251020-20	42" 150 BODY	HYJ-M	1
Fisher Controls Int'l Marshalltown	6/13/2005	132741	251020-30	42" 150 BODY	HYJ-M	1
Fisher Controls Int'l Marshalltown	4/14/2005	132753	251021-10	42" DISC	2142-301	3
Fisher Controls Int'l Marshalltown	6/8/2005	132877	251549-10	6" DISC	2106-401	1
Fisher Controls Int'l Marshalltown	8/11/2005	132861	252354-1	14" DISC	2114-301	4
Fisher Controls Int'l Marshalltown	9/12/2005	132899	252680-1	20" 150 DISC	2120-301	1
Fisher Controls Int'l Marshalltown	10/7/2005	132938	252936-1	10" BODY	1010-333KCA	1
Fisher Controls Int'l Marshalltown	10/17/2005	132961	252995-1	3" DISC	2103-401	1
Fisher Controls Int'l Marshalltown	2/24/2006	133055	254298-1	18" 150 DISC	2118-301	9
Fisher Controls Int'l Marshalltown	2/24/2006	133055	254298-2	18" 150 DISC	2118-301	3
Fisher Controls Int'l Marshalltown	2/24/2006	133062	254299-1	18" 150 DISC	2118-301	12
Fisher Controls Int'l Marshalltown	2/24/2006	133056	254300-1	14" DISC	2114-301	12
Fisher Controls Int'l Marshalltown	3/7/2006	133073	254428-1	3" DISC	2103-401	1
Fisher Controls Int'l Marshalltown	3/28/2006	133110	254635-2	16" CL 150 WAFER BODY	1016-324	2
Fisher Controls Int'l Marshalltown	3/30/2006	133101	254745-1	18" 150 DISC	2118-301	3
Fisher Controls Int'l Marshalltown	6/20/2006	133203	255400-1	16" - 150 WAFER BODY	GEG	1
Fisher Controls Int'l Marshalltown	6/23/2006	133207	255461-1	8" DISC	2108-301	2
Fisher Controls Int'l Marshalltown	12/15/2006	133384	256980-1	8" DISC	2108-301	1
Fisher Controls Int'l Marshalltown	1/31/2007	133388	257003-1	8" DISC	2108-301	1
Fisher Controls Int'l Marshalltown	10/24/2007	133640	259578-1	16" CL 150 WAFER BODY	1016-324	3
Fisher Controls Int'l Marshalltown	8/28/2008	133933	262056-1	6" DISC	2106-401	4
Fisher Controls Int'l Marshalltown	10/21/2008	133970	262535-1	8" DISC	G21614	1
Fisher Controls Int'l Marshalltown	10/28/2013	134006	262579-1	8" DISC	G21614	1
Fisher Controls Int'l Marshalltown	3/23/2009	134218	263482-1	6" DISC	2106-401	1
Fisher Controls Int'l Marshalltown	5/29/2009	134300	263872-1	8" DISC 150#	2108-301	2
Fisher Controls Int'l Marshalltown	8/17/2009	134426	264306-1	8" DISC 150#	2108-301	1
Fisher Controls Int'l Marshalltown	9/11/2009	134472	264461-1	8" DISC 150#	2108-301	2
Fisher Controls Int'l Marshalltown	10/7/2009	134524	264589-1	8" DISC 150 #	2108-301	1
Fisher Controls Int'l Marshalltown	10/14/2009	134538	264630-1	8" DISC 150#	2108-301	1
Fisher Controls Int'l Marshalltown	12/16/2009	134635	264977-1	6" DISC	2106-401	2
Fisher Controls Int'l Marshalltown	2/2/2010	134636	265205-1	6"150# LUG BODY	1106-301	2
Fisher Controls Int'l Marshalltown	3/26/2010	134790	265525-1	6" DISC	2106-401	1
Fisher Controls Int'l Marshalltown	4/7/2010	134825	265591-1	10" DISC	G21644	2
Fisher Controls Int'l Marshalltown	8/2/2010	132106	266161-1	6" 150# LUG BODY	1106-301	4
Fisher Controls Int'l Marshalltown	8/3/2010	132142	266166-1	6" DISC	2106-401	4
Fisher Controls Int'l Marshalltown	8/24/2010	132215	266325-1	10" DISC	G21644	1
Fisher Controls Int'l Marshalltown	12/1/2010	132237	266906-1	6" DISC	2106-401	3

Attachment 4  
Emerson Process Management/Fisher Controls Purchase Orders to Wollaston Alloys, Inc.

Customer	Order Date	Purchase Order	WA Order Number	Part	Pattern	Qty
Fisher Controls Int'l Marshalltown	2/15/2011	132419	267311-1	6" 150# LUG BODY	1106-301	3
Fisher Controls Int'l Marshalltown	4/13/2011	132505	267668-1	6" DISC	2106-401	2
Fisher Controls Int'l Marshalltown	6/14/2011	132601	268027-1	6" DISC	2106-401	3
Fisher Controls Int'l Marshalltown	7/8/2011	132650	268185-1	6" DISC	2106-401	1
Fisher Controls Int'l Marshalltown	2/13/2012	133039	269518-1	8" DISC 150#	2108-301	3

Attachment 5  
Flowserve Purchase Orders to Wollaston Alloys, Inc.

Customer	Order Date	Purchase Order	WA Order Number	Part	Pattern	Qty
Flowserve	6/15/2010	P465343	265937-1	2x1-10A CASING 150# FLANGES	DT-46949AB	1
Flowserve	6/15/2010	P465336	265939-1	BEARING HOUSING	DT-55718A	1
Flowserve	6/16/2010	P465401	265953-1	BEARING HOUSING	DT-55718A	1
Flowserve	6/16/2010	P465401	265953-3	BEARING HOUSING	DT-55718A	1
Flowserve	6/16/2010	P465416	265954-1	2x1-10A CASING 150# FLANGES	DT-46949AB	1
Flowserve	6/16/2010	P465416	265954-3	2x1-10A CASING 150# FLANGES	DT-46949AB	1
Flowserve	6/18/2010	P465577	265956-1	BEARING HOUSING	DT-55718A	1
Flowserve	6/18/2010	P465584	265957-1	2x1-10A CASING 150# FLANGES	DT-46949AB	1
Flowserve (Vernon)	12/30/2010	RLLU01424	267045-1	CASING	DT-43288AB	5
Flowserve (Vernon)	12/30/2010	RLLU01424	267045-2	BEARING HOUSING	DT-55718A	2
Flowserve (Vernon)	12/30/2010	RLLU01424	267045-3	BEARING ADAPTER	DT-21806AJ	2
Flowserve (Vernon)	12/30/2010	RLLU01424	267045-4	BEARING CARRIER COVER	CT-55742A	2
Flowserve (Vernon)	12/30/2010	RLLU01424	267045-5	CASING	DT-43288AB	2
Flowserve (Vernon)	12/30/2010	RLLU01424	267045-6	BEARING HOUSING	DT-55718A	2
Flowserve (Vernon)	12/30/2010	RLLU01424	267045-7	BEARING ADAPTER	DT-21806AJ	2
Flowserve (Vernon)	12/30/2010	RLLU01424	267045-8	BEARING CARRIER COVER	CT-55742A	2
Flowserve (Vernon)	3/14/2011	RLLU01882	267476-1	BEARING ADAPTER	DT-21806AJ	4
Flowserve (Vernon)	3/14/2011	RLLU01882	267476-2	BEARING HOUSING	DT-55718A	4
Flowserve (Vernon)	3/14/2011	RLLU01882	267476-3	BEARING CARRIER COVER	CT-55742A	4
Flowserve (Vernon)	3/14/2011	RLLU01882	267476-4	2x1-10A CASING 150# FLANGES	DT-46949AB	4

## Attachment 6

## Weir Valves Controls USA, Inc Purchase Orders to Wollaston Alloys, Inc.

Customer	Order Date	Purchase Order	Order Number	Part	Pattern	Qty
Weir Valve & Controls USA Inc.	10/11/2005	106028	252934-1	1" 150# POWELL YOKE	30453-002C	1
Weir Valve & Controls USA Inc.	10/11/2005	106028	252934-3	1" 150# POWELL YOKE	30453-002C	1
Weir Valve & Controls USA Inc.	11/21/2005	106178	253316-1	YOKE ARM, HALF	44573	2
Weir Valve & Controls USA Inc.	12/12/2005	106232	253495-1	4" 300# FLEX WEDGE DISC	111384	1
Weir Valve & Controls USA Inc.	12/14/2005	106251	253538-1	3" 300# SWING CHECK BODY	30231-214	1
Weir Valve & Controls USA Inc.	1/10/2006	106334	253757-1	3" 150# GATE VALVE WEDGE	34256	1
Weir Valve & Controls USA Inc.	2/13/2006	106411	254110-1	6" 300 BODY	50288-00	3
Weir Valve & Controls USA Inc.	2/13/2006	106411	254110-2	6" 150/300 DPCV PLATE	50609	6
Weir Valve & Controls USA Inc.	2/13/2006	106411	254110-3	8" BODY DUAL PLATE CHECK VALVE	50604-00	2
Weir Valve & Controls USA Inc.	2/13/2006	106411	254110-4	8" 150/300 DPCV PLATE	50605	4
Weir Valve & Controls USA Inc.	3/28/2006	106484	254569-1	8" DISC WEDGE GATE	62976	1
Weir Valve & Controls USA Inc.	4/13/2006	106543	254771-1	8" SEAT RING	16984	4
Weir Valve & Controls USA Inc.	6/5/2006	106667	255228-1	12" 1500 SWING CHECK DISC	17594-00	1
Weir Valve & Controls USA Inc.	11/6/2006	107058	256006-1	1" 150# POWELL YOKE	30453-002C	4
Weir Valve & Controls USA Inc.	9/21/2006	107165	256163-1	3" 150# GATE VALVE WEDGE	34256	1
Weir Valve & Controls USA Inc.	1/3/2007	107520	257083-1	6" 300# GATE VALVE	82012	2
Weir Valve & Controls USA Inc.	1/15/2007	107559	257208-1	4" 300# FLEX WEDGE DISC	111384	1
Weir Valve & Controls USA Inc.	5/7/2007	107842	258210-1	3" 150# GATE VALVE WEDGE	34256	1
Weir Valve & Controls USA Inc.	5/30/2007	107933	258433-1	8" 150 GATE VALVE BODY	101134	2
Weir Valve & Controls USA Inc.	6/19/2007	108004	258564-1	6" 300# GATE VALVE	82012	1
Weir Valve & Controls USA Inc.	8/13/2007	108167	259017-1	8" DISC WEDGE GATE	62976	1
Weir Valve & Controls USA Inc.	8/13/2007	108167	259017-2	8" DISC WEDGE GATE	62976	1
Weir Valve & Controls USA Inc.	8/29/2007	108195	259148-1	4" 300# FLEX WEDGE DISC	111384	1
Weir Valve & Controls USA Inc.	9/20/2007	108283	259319-1	3" 900# FLEX WEDGE DISC	61785	1
Weir Valve & Controls USA Inc.	6/11/2008	109023	261456-1	4" TCBV BODY	50648-01	1