

# NES MANUFACTURING

101 Swing Road  
Greensboro, North Carolina 27409  
Phone 919/852-3400

Mr. Gary Zech  
Vendor Program Branch  
Division of Quality Assurance, Vendor,  
and Technical Training Center Programs  
Office of Inspection and Enforcement  
United States Nuclear Regulatory Commission  
Washington, DC 20555

Reference: Nuclear Energy Services Manufacturing  
Docket No. 99901018/85-01

Dear Mr. Zech:

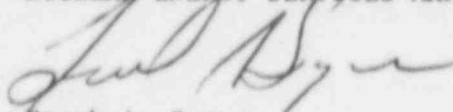
On June 10-15 and June 24-28, 1985, inspectors from your office visited our facility in Greensboro, North Carolina for the purpose of evaluating our work in support of the Three Mile Island Unit defueling project. On August 25, 1985, NES Manufacturing responded in writing to the Notice of Violation and Items of Nonconformance. NES Manufacturing received your letter dated October 15, 1985, requesting additional information and reresponse on several items. On November 12, 1985, the NES Division Quality Assurance Manager met with you and your staff to discuss your request and on November 15, 1985, was granted a verbal extension by Mr. John Craig until December 6, 1985, and to respond to your request for additional information.

Our response to your October 15, 1985, letter is contained in Appendix A for the Notice of Violation and in Appendix B for the Items of Nonconformance.

If you have any questions regarding our response, please contact me or Craig Anderson at Nuclear Energy Services (203) 796-5225.

Sincerely,

NUCLEAR ENERGY SERVICES MANUFACTURING



Frank A. Sugar  
General Manager

8512100139 851210  
PDR GA999 EMVNESM  
99901018 PDR

*CEA*

FAS:CEA:pdp  
Enclosures

cc: T. J. Gillepsie, Bechtel  
J. P. Mahan, NC Department of Labor  
F. Standerfer, GPU

## APPENDIX A

Nuclear Energy Services Manufacturing  
Docket No. 99901018/85-01

### USNRC Request for Additional Information on Notice of Violation

Your August 25, 1985 response did not adequately address the Notice of Violation as stated in our July 26, 1985 letter. Bechtel Specification 15737-2-M-101A(Q), Revision No. 1 imposed the requirements of 10 CFR Part 21 upon NES Manufacturing for items used in the fabrication of the defueling canisters for Three Mile Island, Unit 2. The items noted on the material POs referenced in the violation were purchased by NES for specific application on the defueling canisters which Bechtel designated as "Important to Safety" for safety-related reasons. Consequently, the items are subject to requirements unique to nuclear applications.

The reasons stated in your August 25, 1985 letter for NES not imposing the requirements of 10 CFR Part 21 on certain vendors are not consistent with other NES activities in this area (i.e., the NRC inspector noted that NES imposed Part 21 requirements upon Southern Spring and Stamping for forming operations and Keystone Tubular Service (5 orders) and A. J. Metal Supply (3 orders) for ASTM material). As noted in the violation, NES did not require a certain number of vendors to furnish material and machining services under the requirements of 10 CFR Part 21. Based upon the requirements imposed upon NES and your failure to impose these requirements upon subtier suppliers, describe how NES can be assured that identified defects and/or noncompliances would be reported when items utilized in the defueling canisters were purchased as "general stock." In addition, describe the proposed corrective and preventive measures, including the dates of implementation, to satisfactorily address the concerns noted in the Notice of Violation.

### NES Manufacturing Response

NES Manufacturing recognizes that an inconsistent approach to the application of 10 CFR 21 to purchases occurred. NES Manufacturing erred when ordering the materials

and services noted in the second paragraph above with 10 CFR 21 imposed.

Although the Bechtel Specification 15737-2-M-101A(Q), Revision 1 imposed the requirements of 10 CFR 21 for supply of the defueling canisters, the exemptions of 10 CFR 21.7 and 10 CFR 21.3(4)(a-1) apply for commercial grade items as identified in our original response to the Notice of Violation. The materials in question were ordered by NES Manufacturing as commercial grade items for this specific order and were not subject to design or specification requirements unique to facilities licensed pursuant to 10 CFR 50.

Our position on contracted machining services is as stated in our original response.

For your information, a tabulation of all purchase orders written for the TMI-2 canister work order is included as Attachment A-1. This attachment includes rationale as to the imposition of 10 CFR 21. As NES Manufacturing does not believe a violation occurred, no corrective action is proposed.

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
3021	National Welding	Welding Machines and Wire Feeds	No; Code 1	No	No	No
3951	Carney Machinery	Lathe	No; Code 1	No	No	No
3854	Sunox	Welding Electrode	Yes; Code 2	Yes	Yes	No
3936	Pall Trinity Micro Corp.	Filter Disc and Plate	No; Code 3	No	No	No
3938	Keystone Tubular	2.875"OD,2.251"ID SS 304L or 316L ASTM A269 Tube	No; Code 4	Yes	Yes	No
		1.315"OD,0.815"ID SS 316L ASTM A269 or A312 Tube	No; Code 4	Yes	No	No
		2.125"OD,2.000"ID SS 316L ASTM A269 Tube	No; Code 4	Yes	Yes	No
		1½" Sch. 80 SS ASTM A312-304L Pipe	No; Code 4	Yes	No	No
		2.125"OD,2.000"ID SS 316L ASTM A269 Tube	No; Code 4	Yes	Yes	No
3941	Dubose Steel	3" Dia. SS 316L ASTM A479 or A276 Bar	No; Code 4	Yes	Yes	No



ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
3941 (cont'd)		2 1/4" Dia. SS 316L ASTM A479 or A276 Bar	No; Code 4	Yes	Yes	No
		1 1/8" Dia. SS 304L ASME SA479 or SA276 Bar	No; Code 4	Yes	No	No
		2 3/4" Dia. SS 304L ASME SA479 or SA276 Bar	No; Code 4	Yes	Yes	No
		1/2"x3/4" SS 304L ASME SA479 or SA276 Bar	No; Code 4	Yes	No	No
		2" Dia. SS 316L ASTM A479 or A276 Bar	No; Code 4	Yes	Yes	No
		1 1/2" Dia. SS 316L ASTM A479 or A276 Bar	No; Code 4	Yes	No	No
		3" Dia. SS 304L ASTM A479 or A276 Bar	No; Code 4	Yes	Yes	No
3942*	Brown-Boveri	Machine Upper Head Filter Canister from Mat'l Supplied by NES/Bechtel	No; Code 5	Yes	Yes	No
		Machine Upper Head K/O Canister from Mat'l Supplied by NES/Bechtel	No; Code 5	Yes	Yes	No
		Machine Upper Head Fuel Canister from Mat'l Supplied by NES/Bechtel	No; Code 5	Yes	Yes	No
		Machine Fuel Can. Bulkheads from Mat'l Supplied by NES/Bechtel	No; Code 5	Yes	Yes	No

\*Purchase Order Cancelled

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NEC MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
3998	Carolina Steel	½"x6x12 SS 304 ASTM A240 Plate	No; Code 4	No	Yes	No
4007	Roller Bearing	Tolerance Ring (Bearing)	No; Code 4	No	No	No
4008	Keystone Tubular	8" Dia. Sch. 20 SS 304L ASTM A312 Pipe	No; Code 4	No	Yes	No
4009	J.T.Ryerson	7 3/4"OD x 6 7/8"ID x 1½" Thick SS 304L Ring ASTM A240	No; Code 4	No	Yes	No
		7½"OD x 3/16" Thick SS 304L Disc ASTM A240	No; Code 4	No	Yes	No
		7½"OD x 1/8" Thick SS 304L Disc ASTM A240	No; Code 4	No	Yes	No
4010	A-Jay Metal	3/4" Dia. SS 304L ASTM A279 or A276 Bar	No; Code 4	No	No	No
		¾" x 3/8" SS 304L ASTM A279 or A276 Bar	No; Code 4	No	No	No
		1" Dia. SS 304L ASTM A279 or A276 Bar	No; Code 4	No	No	No
4011	A-Jay Metal	1 3/8" or 1½" Dia. Nickel Alloy ASME SB446 Bar	No; Code 4	Yes	No	No

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4012	Automotive Fasteners	1/4"-20UNC-2A x 1/2"L Pan Head Slotted Mach. Screws 300 Series SS	No; Code 4	No	No	No
		#8-32UNC-2A x 1/2"L Pan Head Slotted Mach. Screws 300 Series SS	No; Code 4	No	No	No
4014	Carolina Steel	Angle and Bar for Tooling	No; Code 1	No	No	No
4015	Odell Mill	Spur Gear, Rack and Bearing for Tooling	No; Code 1	No	No	No
4016	Reid Tool	Knob for Tooling	No; Code 1	No	No	No
4032*	BISCO	Load Poison in Tubes	Yes	No	No	No
4046	Southern Spring & Stamping	Ben 0.031" Dia. and 0.020" Dia. Wire Mat'l Supplied by NES Mfg. into "O" and "C" Ring Clips	No; Code 6	Yes	No	No
4046A	A-Jay Metal	0.031" Dia. SS ASTM A581 Wire	No; Code 4	Yes	No	No
		0.022" Dia. SS ASTM A581 Wire	No; Code 4	Yes	No	No

\*Order cancelled since BISCO unable to complete work; work not presented to customer for acceptance.

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4093	Aro Corp.	Die Grinders	No; Code 1	No	No	No
4101	Remco	P.I. Tape	No; Code 1	No	No	No
4113	Keystone Tubular	1½" Sch. 10 SS 304L Welded ASTM A312 Pipe	No; Code 4	Yes	No	No
		¾" OD x 0.035" Wall SS 304L ASTM A269 Tube	No; Code 4	Yes	No	No
4176	Newman Equip.	Misc. Tooling	No; Code 1	No	No	No
4199	Salem Tools	Tool Post, Holders and Drills	No; Code 1	No	No	No
4234	Carolina Steel	Carbon Steel Plate	No; Code 1	No	No	No
4235	Dixie Tools	McGill Bearing	No; Code 1	No	No	No
4236	Kahl Specialty	1½"x2½"x64"Lg. Harding	No; Code 1	No	No	No
4237	Automotive Fasteners	Bolts and Pins for Tooling	No; Code 1	No	No	No
4238	J.T. Ryerson	Stainless Steel Plate for Tooling	No; Code 1	No	No	No
4276	Jessop Steel	13 5/8"OD x 1 3/8"T SS 304L ASTM A240 Disc	No; Code 4	Yes	Yes	No

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4276 (cont'd)		13½"OD x ½"T SS 304L ASTM A240 Plate	No; Code 4	Yes	Yes	No
		9½"OD x 3/8"T SS 304L ASTM A240 Plate	No; Code 4	Yes	Yes	No
		11" x 11" x ½"T SS 304L ASTM A240 Plate	No; Code 4	Yes	Yes	No
		8" x 8" x ½"T SS 304L ASTM A240 Plate	No; Code 4	Yes	Yes	No
		13 5/8" x ½"T SS 304L ASTM A240 Plate	No; Code 4	Yes	Yes	No
4279	Keystone Tubular	2½" Sch. 40 SS 304L ASTM A312 Pipe	No; Code 4	Yes	Yes	No
4280	Cambridge Wire Cloth Co.	Filter Discs; 2.6" Dia. x 8 Mesh, AISI Type 304L or 316L SS	No; Code 4	Yes	Yes	No
4281	Atlantic Custom Packaging	Packaging Materials	No	No	No	No
4282	Carolina Steel	6"x6"x¼" Tube Steel for Tooling	No; Code 1	No	No	No
4283	Keystone Tubular	12" Sch. 10 SS 304L or 316L ASTM A312 Pipe	No; Code 4	Yes	Yes	No
4284	National Welders	Pandjirus Head Director	No; Code 1	No	No	No

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4286	Cambridge Wire Cloth Company	Filter Screens Involving Welding	Yes	Yes	Yes	No
4286A	A-Jay Metal	3/16" Dia. SS 304L ASTM A276 or A479 Rod	No; Code 4	No	No	No
4287	Advanced Prod.	Formed Steel Seals of Small Dia. Fabbbed to a Dwg. Unique to Canisters	Yes	Yes	No	No
4291	Air Products	Hansen Plug 1/2" Part #ML2-K16 (316SS)	No; Code 4	No	No	No
		Hansen Plug 3/8" Part #ML3-K21 (316SS)	No; Code 4	No	No	No
		Hansen Socket 1/2" Part #ML2-H16 (316SS)	No; Code 4	No	No	No
		Hansen Socket 3/8" Part #ML3-H21 (316SS)	No; Code 4	No	No	No
		Hansen Socket 1/2" Part ML2-H16 (316SS)	No; Code 4	No	No	No
		Hansen Seal Part #914- 3-192 ("O"-ring)	No; Code 4	No	No	No
		Hansen Seal Part #902- 14-192 ("O"-ring)	No; Code 4	No	No	No

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4292	Charlotte Valve & Fitting	Cajon Close Nipples 3/8" NPT #SS-6-CN 300 Series SS	No; Code 4	No	No	No
		Cajon Close Nipples 1/2" NPT #SS-4-CN 300 Series SS	No; Code 4	No	No	No
		Cajon Hex Nipples 1/2" NPT #SS-4-HN	No; Code 4	No	No	No
		Cajon Street Tee 1/2" NPT #SS-4-ST	No; Code 4	No	No	No
4292A	Piedmont Hub	Hex Bushing 1 1/2"x3/8" 300 Series SS	No; Code 4	No	No	No
4293	B&B Hose & Rubber Co.	Special Version P/T Coupling Co. Part #25F Male Adptr.	No; Code 4	No	No	No
		Special Version P/T Coupling Co. Part #20F Male Adptr.	No; Code 4	No	No	No
		Caps for Above for Hydro Test	No; Code 1	No	No	No
4297	Wallace Mfg.	Cut and Bend 0.625" and 2 1/2" Tube from Mat'l Furnished by NES Mfg.	No; Code 5	No	No	No

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4298	A-Jay Metal	9"x9"x1/8" T SS 304L ASTM A240 Plate	No; Code 4	Yes	Yes	No
		9"x9"x3/16" T SS 304L ASTM A240 Plate	No; Code 4	Yes	Yes	No
		13 1/2" OD x 3/4" T SS 304L ASTM A240 Plate	No; Code 4	Yes	Yes	No
		1" Dia. SS 304L Bar	No; Code 4	Yes	No	No
		3/8" Sq. SS 304L Bar	No; Code 4	Yes	No	No
		1"x16 ga. SS 304L ASTM A240 Strip	No; Code 4	Yes	No	No
4302	Keystone Tubular	0.625" Dia. x 0.049" Wall SS 304L ASTM A269 Tube	No; Code 4	Yes	No	No
		2 1/4" OD x 0.065" Wall SS 304L ASTM A269 Tube	No; Code 4	Yes	Yes	No
4303	Custom Industries	Machine Support Plates and Support Rings from Mat'l Supplied by NES Mfg.	No; Code 5	No	Yes	No
4311	Acme Namepls.	Nameplates	No; Code 7	No	No	No
4311A	American ID Products	Nameplates	No; Code 7	No	No	No
4312	Charlotte	Nupro Relief Valve, 1/2" NPT, Part #SS-4CPA2-3 300 Series SS	No; Code 4	No	No	No



ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FROM  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4313	Sanomeyer	16"OD x 3"T Stainless Disc for Tooling	No; Code 1	No	No	No
4322	Carolina Gasket and Rubber	"0"-ring seals	No; Code 4	No	No	No
4323	Flight Dynamics	Code Calculation Review	No; Code 9	No	No	No
4326	Brown-Boveri	Machine Sample Bulkheads	No; Code 8	No	No	No
4337	K&C Machine	Machine Poison Tube End Plugs and Caps and Turn End Skirt from Mat'l Supplied by NES Mfg.	No; Code 5	No	Yes	No
4339	Meier Metal	14"OD x 1½" Thick Alum. Discs for Tooling	No; Code 1	No	No	No
4345	Engineered Plastics	Protective Gaskets	No; Code 4	No	No	No
4356	B&W - Advanced Ceramics	Ultralight Concrete	No; Code 4	No	No	No
4359	Machinex	Machine Nipple from 3/4" Bar Furnished by NES	No; Code 5	No	No	No
		Machine 3/4" Bolt from Stock Furnished by NES	No; Code 5	No	No	No
4360	Carolina Steel	14" x 14" x 3/8"T SS 304 for Tooling	No; Code 1	No	No	No

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4363	Carolina Steel	2¼" Dia. SS 316L ASTM A479 or A276 Bar	No; Code 4	Yes	Yes	No
4373	Dubose Steel	1" Dia. SS 304L ASTM A479 or A276 Bar	No; Code 4	Yes	No	No
		1¼" Dia. SS 304L ASTM A479 or A276 Bar	No; Code 4	Yes	No	No
4376	Henry Walke	Thread Sealant	No; Code 4	No	No	No
4391	Dubose Steel	¾"x3/4" SS 304L ASTM A479 or A276 Bar	No; Code 4	Yes	No	No
4399	Ryder Truck	Rental of 15' Van	No; Code 1	No	No	No
4401	Carolina Steel	1" Dia. SS 304L ASTM A479 or A276 Bar	No; Code 4	No	No	No
		1¼" Dia. SS 304L ASTM A479 or A276 Bar	No; Code 4	No	No	No
4402	PTL	Perform RT on Test Piece	No; Code 8	No	No	No
4404	ENSCO	"Fel-Pro" Nuclear Gr. N-5000 Bolt Thread Lube	No; Code 4	No	No	No
4408	Sunox	Welding Electrode with Delta Ferrite Reqts.	Yes; Code 2	Yes	Yes	No
4409	Neal Mfg.	Welding Stands and Equip.	No; Code 1	No	No	No

ATTACHMENT A-1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4410	J.M. Tull	1 3/8" Dia. Bar for Tooling	No; Code 1	No	No	No
4412	U.S. Indust. Chemical	Filtered Alcohol	No; Code 4	No	No	No
4413	Carolina Steel	Carbon Steel Ring and Bars for Tooling	No; Code 1	No	No	No
4414	Mazzella	Wire Rope, Shackles, and Lifting Eyes for Tooling	No; Code 1	No	No	No
4427	Neal Mfg.	Cold Rolled Steel Rings for Tooling	No; Code 1	No	No	No
4447	Keystone	2½" Dia. SS 304L ASTM A312 Sch. 40 Pipe	No; Code 4	Yes	Yes	No
4457	Dixie Bearing	Pipe Sealant, Loctite Nuclear Grade PST #580	No; Code 4	No	No	No
4462	PTL	RT and UT Canister	Yes	Yes	Yes	No
4463	Cambridge Wire Cloth Company	Filter Screens Involving Welding	Yes	Yes	Yes	No
4467	American GFM	Machining of Canister Heads and Bulkheads from Mat'l Supplied by NES Mfg.	No; Code 5	No	Yes	No
4468	B&B Hose &	Special Version P/T Coupling Co. Part No. 25F Male Adptr.	No; Code 4	No	No	No

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4470	McMaster Carr	Lifting Eyes for Tooling	No; Code 1	No	No	No
4469A	Dubose Steel	3/8"x6'x12' Carbon Steel Plate ASTM A516 Gr. 70	No; Code 4	No	Yes	No
		3/8"x6'x12' Carbon Steel Plate ASTM A516 Gr. 70	No; Code 4	No	Yes	No
4482	National Welding	Welding Equipment	No; Code 1	No	No	No
4486	Carolina Steel	3/16"x8 15/16" Sq. Alum. Plate for Tooling	No; Code 1	No	No	No
4486A	Meier Metal	1" Dia. Alum. Pipe for Tooling	No; Code 1	No	No	No
4488	Brown-Boveri	Machining of Heads and Bulkheads from Mat'l Supplied by NES Mfg.	No; Code 5	Yes	Yes	No
4489	PTL	RT and UT of Canisters	Yes	Yes	Yes	No
4495	Keystone Tubular	16" Sch. 10 or 40 SS or Carbon Steel for Tooling	No; Code 1	No	No	No
4496	Automotive Fasteners	1/2" Dia. x 1 1/2" Hex Hd. SS (1/2"-13 UNC) for Tooling	No; Code 1	No	No	No

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4558	Automotive Fasteners	Bolts and Nuts for Tooling	No; Code 1	No	No	No
4600	Atlantic Custom Packaging	Packaging Materials	No	No	No	No
4607	Custom Industries	Machining of Bottom Pls., Straps, Pins, Blocks, Impact Plates, Seal, and Tube Sleeves from Mat'l Supplied by NES Mfg.	No; Code 5	No	Yes	No
4608	Wallace Mfg.	Cut and Bend Tube from Material Furnished by NES Mfg.	No; Code 5	No	Yes	No
4615	SAC Tool & Die	Machining of Parts for Tooling	No; Code 1	No	No	No
4621	J.A. King	Scale and Related Equip.	No; Code 1	No	No	No
4622	Tarheel Paper	Bags and Ties (Packaging Materials)	No	No	No	No
4624	Atlantic Custom Packaging	Packaging Materials	No	No	No	No
4632	Custom Industries	Machining Ribs, Sleeves and Tubes	No; Code 5	No	Yes	No
4635	Automotive Fasteners	3/8" Screws and Nuts for Tooling	No; Code 1	No	No	No

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4636	Piedmont Hub	3" Sch. 160 CS Pipe for Tooling	No; Code 1	No	No	No
4637	A-Jay Metal	Angles and Bars for Tooling	No; Code 1	No	No	No
4639	SAC Tool and Die	Machine Pipe from Stock Furnished by NES Mfg.	No; Code 5	No	Yes	No
4642	Custom Industries	Tumble Deburr Small Parts Furnished by NES Mfg.	No; Code 5	No	Yes	No
4657	SAC Tool and Die	Machine End Caps from Mat'l Supplied by NES Mfg.	No; Code 5	No	Yes	No
4664	Custom Industries	Mill Parts to Length from Mat'l Furnished by NES Mfg.	No; Code 5	No	Yes	No
4665	Contractors Service & Rental	Scaffolding and Walkways	No; Code 1	No	No	No
4666	Southern Rubber	Hoses and Fittings for Hydro Test	No; Code 5	No	No	No
4667	Sunox	N <sub>2</sub> Hose	No; Code 5	No	No	No
4669	SAC Tool and Die	Fab. Disc and Frame used for Tooling	No; Code 5	No	No	No
4673	PTL	Perform Chem. Anal. for Information	No; Code 8	No	No	No

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4674	SAC Tool and Die	Machine Pins, Plugs, Caps, and Chucks for Tooling	No; Code 1	No	No	No
4678	Southern Rubber	Hoses and Fittings for Tooling	No; Code 1	No	No	No
4677	Contractors Service	Concrete Vibrator	No; Code 1	No	No	No
4679	SAC Tool and Die	Fab. Jigs and Tooling	No; Code 1	No	No	No
4681	SAC Tool and Die	Machine Hansen Sockets from Mat'l Furnished by NES Mfg.	No; Code 5	No	No	No
4682	Contractors Service	Cement Mixer Rental	No; Code 1	No	No	No
4685	Hertz	Van Rental	No; Code 1	No	No	No
4691	Hertz	Truck Rental	No; Code 1	No	No	No
4710	Doall	Lathe	No; Code 1	No	No	No
4714	J.A. King	Scale	No; Code 1	No	No	No
4782	Advanced Refractory Technologies	B <sub>4</sub> C Compacts	Yes	Yes	Yes	Yes
4790	Carolina Steel	Discs and Bars for Use as Tooling	No; Code 1	No	No	No



ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4791	Carolina Jack	Enerpac 10T Jack	No; Code 1	No	No	No
4805	Deerman	Pipe Tool	No; Code 1	No	No	No
4806	Safety Equip.	O <sub>2</sub> Analyzer and Parts	No; Code 1	No	No	No
4807	SAC Tool and Die	Fab. Jigs as Tooling	No; Code 1	No	No	No
4810	Custom Industries	Rental of Equipment	No; Code 1	No	No	No
4821	Sunox	Temperature Indicating Crayons	No; Code 1	No	No	No
4848	CPG Constr.	Rent of Test Area	No; Code 1	No	No	No
4852	D.S. Miller	Machine K/O Canister Heads from Mat'l Furnished by NES Mfg.	No; Code 5	No	Yes	No
4873	Dixie Bearing	Pipe Sealant, Locktite Nuclear Grade PST #580	No; Code 4	No	No	No
4874	Jessop Steel	4"x14½"OD ASME SA240 Plate SS 304L	No; Code 4	No	Yes	No
4880	B&B Hose and Rubber	Quick Coupling Used as Tooling	No; Code 1	No	No	No
4881	Southern Rubber	Hose Used as Tooling	No; Code 1	No	No	No



ATTACHMENT A.I

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
4883	Piedmont Hub	2"x½" Bushing Used as Tooling	No; Code I	No	No	No
4886	Livingstone and Haven	Hydro Pumps	No; Code I	No	No	No
4887	SAC Tool	Machine Parts for Canister Grapple	No; Code I	No	No	No
4959	B&B Hose and Rubber	P/T Coupling Co. Female Connector Part #B25-SS	No; Code I	No	No	No
		P/T Coupling Co. Part #25B Alum.	No; Code I	No	No	No
		P/T Coupling Co. Part #20B Alum.	No; Code I	No	No	No
4960	Piedmont Hub	2½"x3/4" 304 SS Threaded Reducers Used as Tooling	No; Code I	No	No	No
		Stainless Steel Pipe Bushing 3/4"x½" Used as Tooling	No; Code I	No	No	No
5020	Atlantic Custom Packaging	Impact Indicators	No; Code I	No	No	No
5021	Atlantic Custom Packaging	Dessicants	No; Code I	No	No	No

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
5065	Gilmont	Flowmeter	No; Code 1	No	No	No
5066	Pump & Tank	Pump	No; Code 1	No	No	No
5070	Carolina Steel	I-Beams and Bars for Use as Tooling	No; Code 1	No	No	No
5071	Brooks Lumber	Lumber and Screws	No; Code 1	No	No	No
5073	Friendly Rubber	Hose Assemblies Used for Tooling	No; Code 1	No	No	No
5103	Circle Seal Controls	ASME Code Relief Valves	Yes	Yes	Yes	Yes
5107	Phucor	Pump Used for Tooling	No; Code 1	No	No	No
5108	Wysong	Finish Machine Bulkhead Weldment from Mat'l Furnished as Welded by NES Mfg.	No; Code 5	Yes	Yes	No
5109	American GFM	Finish Machine Bulkhead Weldment from Mat'l Furnished as Welded by NES Mfg.	No; Code 5	Yes	Yes	No
5111	Sunox	Nuclear Grade Leak Test Solution	No; Code 4	No	No	No
5112	Charlotte Valve and Fitting	Nupro Valve and Elbow Used as Tooling	No; Code 1	No	No	No

ATTACHMENT A.1

**MATRIX OF PURCHASE ORDERS FOR**  
**NES MANUFACTURING WORK ORDER**  
**84091 (TMI-2 CANISTER PROGRAM)**

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
5115	Charlotte Valve and Fitting	Cajon Male Tee, Part #SS-6-MT	No; Code 4	No	No	No
		Cajon Hex Reducing Coupling, Part #SS-6-HRCG-4	No; Code 4	No	No	No
5116	Air Products	Hansen Plug, 3/8" SS, Part #ML3-K21- RW-192	No; Code 4	No	No	No
		Hansen Socket, 3/8" SS, Part #ML3-H21-192	No; Code 4	No	No	No
5145	Dwyer Intr.	Pressure Gage #2008	No; Code 1	No	No	No
5150	Air Products	Hansen Sockets Used for Tooling	No; Code 1	No	No	No
5154	Carolina Gasket and Rubber	Gaskets Used for Tooling	No; Code 1	No	No	No
5157	Carolina Steel	Bar and Shapes Used for Tooling	No; Code 1	No	No	No
5275	Atlantic Custom Packaging	Impact Indicators	No; Code 1	No	No	No

ATTACHMENT A.IMATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)

<u>P.O.#</u>	<u>VENDOR</u>	<u>DESCRIPTION</u>	<u>10CFR21 APPLICABLE</u>	<u>10CFR21 IMPOSED</u>	<u>QA PROGRAM REQUIRED</u>	<u>QA PROGRAM SPECIFIED</u>
5335	Carolina Steel	Bar Used for Tooling	No; Code 1	No	No	No
5336	Keystone Tubular	Pipe Used for Tooling	No; Code 1	No	No	No
5337	Automotive Fasteners	Screws and Nuts Used for Tooling	No; Code 1	No	No	No
5338	Michael Dixon	Contract Services	No; Code 8	No	No	No

ATTACHMENT A.1**MATRIX OF PURCHASE ORDERS FOR  
NES MANUFACTURING WORK ORDER  
84091 (TMI-2 CANISTER PROGRAM)-**Code Legend for 10CFR21 APPLICABILITY

Code 1 - Tooling

Code 2 - Welding electrode ordered with ferrite content considered a specification requirement unique to nuclear facilities.

Code 3 - Per client, purchasing of this item as a commercial grade item is acceptable.

Code 4 - Commercial grade item not ordered with requirements unique to nuclear facilities, used in other applications and ordered based on manufacturer's published product description.

Code 5 - Machining involving turning, drilling, boring, threading, bending, deburring, tapping, reaming, milling, etc. where no welding, heat treating, nondestructive examination, or activity that alters the material properties is performed.

Code 6 - Bending small wire (less than 1/32" in diameter) to form clips to hold parts during assembly.

Code 7 - Not important to safety or safety related.

Code 8 - Not permanent plant material.

Code 9 - For NES Mfg. information only; independent check of ASME Code Section VIII design adequacy performed for commercial reasons only.

Other Legend

10CFR21 Applicable - NES Mfg. evaluation of whether 10CFR21 should have been applied to P. O.

10CFR21 Imposed - Whether actual P. O. issued invoked 10CFR21.

QA Program Required - Whether QA Program should have been required (see Attachment 4.1 of original response).

QA Program Specified - Whether P. O. invoked QA Program requirements. Where NES Manufacturing failed to specify a QA Program, corrective action has been taken in accordance with letter NES Mfg. to GG. Zech, USNRC, dated August 25, 1985.

## APPENDIX B

### B.1 USNRC Request for Additional Information on Nonconformance 1

The NES response stated that receiving inspection was performed consistently for the items furnished. This is contrary to the NRC inspector's findings (i.e., dimensional checks to assure correct size were not performed on the neutron poison shrouds, upper closure heads, bulkheads, filter bundles, recombined catalyst and DEOXO-D catalyst). Provide copies of the documentation to verify that Bechtel supplied documents (e.g., data packages) were reviewed for adequacy by NES.

#### NES Manufacturing Response

NES Manufacturing did not mean to imply with respect to the Bechtel-supplied items that we were in full compliance with our procedures or that extensive receiving inspection had been performed. The "Preventive Action" portion of our original response committed to necessary corrective action. As noted in our response, receiving inspection was performed as follows for the items noted:

<u>Item</u>	<u>Scope of Receiving Inspection</u>
Neutron Poison Shrouds	<ul style="list-style-type: none"><li>. Identification</li><li>. Documentation Availability</li><li>. Lack of Shipping Damage</li></ul>
Filter Bundles	<ul style="list-style-type: none"><li>. Identification</li><li>. Documentation Availability</li><li>. Lack of Shipping Damage</li></ul>
Lower Closure Heads	<ul style="list-style-type: none"><li>. Identification</li><li>. Documentation Availability</li><li>. Overall Dimensions</li></ul>
Upper Closure Heads	<ul style="list-style-type: none"><li>. Identification</li><li>. Documentation Availability</li></ul>
Catalysts	<ul style="list-style-type: none"><li>. Identification</li><li>. Documentation Availability</li></ul>

Inasmuch as our customer, Bechtel North America Power Corporation, had performed shop inspection of the neutron poison shrouds and filter bundles, NES Manufacturing did not perform dimensional inspection on these items. Our receiving inspection assured no damage during shipment and availability of Bechtel-approved documentation.

Similarly, the lower closure heads were inspected in the vendor's shop by our customer and were subject to verification of documentation availability at NES Manufacturing. Dimensional checks of diameter and head depth were performed by NES Manufacturing because the weld preparation was to be remachined from a single vee geometry to a "J" bevel to accommodate automatic GTAW. Dimensional verification was necessary to assure adequate overall length of the head. The traveler attached as Exhibit B.1.1 contains documentation of the machining measurements and a signoff for Operation No. 10 for compliance with Bechtel Purchase Order No. TC-016160-3.

The upper closure heads and bulkheads were received as raw material. Receiving inspection was performed to assure documentation availability and adequacy. These materials were subsequently sent to a machine shop for machining. Inasmuch as all dimensions would change during machining, receiving inspection dimensional verifications were deemed unnecessary.

Catalysts were inspected to an extent to assure documentation availability. Catalysts were not dimensionally inspected.

Attached as Exhibit B.1.2 are samples of documentation on the lower closure heads, upper closure heads, bulkheads, and catalysts illustrating NES Manufacturing documentation review.

NES Manufacturing fully recognizes that receiving inspection activities were not adequately documented on the Bechtel-supplied items as required by procedures, and the corrective action commitments of our original response are adequate to resolve the nonconformance.



## B.2 USNRC Request for Additional Information on Nonconformance 2

While the NES response states that the Item not Noncompliance was correct the response also stated that it was NES Manufacturing's intent to provide segregation in every case. Bechtel Technical Specification 15737-2-M-101A specifies that NES' QA Program met the applicable requirements of ANSI N45.2. Section 16 of ANSI N45.2 states that physical segregation and marking are the preferred methods to control nonconforming items. This requirement is reflected in NES Procedure N-15. Provide copies of the NES procedures which are used to define when physical separation will be used.

### NES Manufacturing Response

As stated in our original response, it was not NES Manufacturing's intent to provide physical segregation in every case:

"Paragraph 4.4 of NES Procedure N-15 states in total:

4.4 As a minimum, control of nonconforming items shall be accomplished by tagging, marking, or other means of identification. When practical, physical segregation shall be used in addition to the tagging, marking, etc.

It was not NES Manufacturing's intent to provide segregation in every case; however, in the cases noted by the inspector, NES Manufacturing did fail to comply with segregation and tagging requirements."

Procedure Q-13 has been revised to be consistent with the requirements of Paragraph 4.4 of NES Procedure N-15.

It is not reasonable for NES Manufacturing to specifically define each case when physical segregation is required. Our commitment to physical segregation is consistent with 10 CFR 50, Appendix B and ANSI N45.2, Paragraph 16, third subparagraph.



B.4 & 6 USNRC Request for Additional Information on Nonconformance 4 & 6

In Technical Specification 15737-2-M-101(Q), Bechtel imposed upon NES the requirements of ANSI N45.2 and Appendix B to 10 CFR Part 50 for the items used in the fabrication of the defueling canisters. Further, Section 7.0 of the specification designates the canisters as Important to Safety for nuclear safety-related reasons. Since the items are subject to requirements unique to the nuclear applications of the furnished canisters, NES was required to qualify all suppliers.

Machinex, Inc. (machined nickel alloy bolts for the hold down fasteners in the fuel canisters); Southern Spring & Stamping (formed the clips for the "O" and "C" rings); Piedmont Hub, Charlotte Valve & Fittings, B&B Hose and Rubber, Air Products (supplied fittings); and Advanced Products (supplied seals) are not on the schedule to be post-qualified. This is clearly inconsistent with the requirement imposed upon NES. Provide information which describes the NES decision not to post-qualify these vendors.

Also during the inspection, documentation was requested but not made available to the NRC inspector to verify that NES had qualified A-Jay Metal in August 1984 as noted in your response. Provide copies of this documentation.

NES Manufacturing Response

The defueling canisters are ASME Section VIII vessels. Since Section VIII does not require QA Programs, qualification or surveillance of vendors, NES Manufacturing developed Appendix 4.1 of the original response with the guidance provided by ANSI N45.2 and ANSI N45.2.13. We considered the history of the product in functional performance, the importance of the item to safety, and the complexity of the item. Further, when the designer specified a part by specific reference to manufacturer, catalog, part or serial number, and size description, NES Manufacturing considered the part prequalified as a commercial grade item. Attachment A.1 herein contains a listing of all purchase orders written for the TMI-2 canister work order and contains a column entitled "QA Program Required". This column is a tabulation of the decisions reached using Appendix 4.1 of the original response as to whether a QA Program was

required with attendant qualification and audit responsibilities.

On the basis of this rationale, qualification of the suppliers noted in the second paragraph of your request was not required. The following provides detail as to these items:

<u>Vendor</u>	<u>P.O.</u>	<u>Product/(Rationale)</u>
Machinex	84091-4359	Machined 3/4" diameter bolts and nipples from stock supplied by NES Manufacturing. (Bolting less than 1" in diameter; piping components less than 2" NPT size.)
Southern Spring and Stamping	84091-4046	Cut and bent 0.020" and 0.031" diameter wire to form retaining clips for "O" and "C" rings from material supplied by NES Manufacturing. (The clips are used only to secure the "O" and "C" rings during assembly of the canister.)
Piedmont Hub	84091-4292A	Provided 1-1/2"x3/8" 300 SS hex bushing. (Piping component of less than 2" nominal pipe size.)
Charlotte Valve and Fitting	84091-4292 84091-5115	Provided 1/4" and 3/8" Cajon stainless fittings. (Piping component less than 2" nominal pipe size.)
B&B Hose and Rubber	84091-4293 84091-4468	Provided 2 1/2" and 2" P/T Coupling Company male adapters. (Designer-specified commercial grade item.)
Air Products	84091-4291 84091-5116	Provided 1/4" and 3/8" Hansen sockets and plugs and "O" ring seals. (Piping component less than 2" nominal pipe size.)
Advanced Products	84091-4287	Metal "O" ring and "C" ring seals of 0.158" and 0.126" diameter, respectively. (Gasket and sealing materials ordered to an Advanced Products drawing with an assigned B&W drawing number.)

Attached as Exhibit B.4.2 is NES qualification and Approved Vendors List documentation showing that A-Jay Metals was a qualified vendor at the time of order of items for NES Manufacturing.

NES Manufacturing's position with respect to qualification of vendors is as stated in Appendix 4.1 to our original response. Qualification of vendors is consistent with industry practice and with high quality standards used in the industry.

#### B.5 USNRC Request for Additional Information on Nonconformance 5

The NES response stated that the items noted were materials suitable for outdoor storage. However, this response does not consider that the materials are primarily stainless steel which is subject to stress corrosion cracking when subjected to concentrations of chemicals such as chlorides which could promote corrosion. NES did not protect materials from corrosion, dirt, and other contamination during storage. Provide copies of the procedures utilized to make the determination as to when and what special storage conditions may be necessary. Additionally, provide a description of the specific steps which have been taken to upgrade your storage conditions to provide the material protection required by Bechtel Specification 15737-2-M-101A.

#### NES Manufacturing Response

As stated in our original response, the storage provisions made for the stainless steel items were in compliance with Bechtel specification requirements. It is not unusual to store stainless steel items outside, and the practice is common in the industry. The items were not subject to chemicals or chlorides in storage that would induce IGSCC.

As part of the storage upgrade, specific steps were taken as follows:

- . Management attention was focused on storage provisions for the canister program.
- . A fenced hold area was constructed for storage of nonconforming items.
- . Surveillance of storage areas was initiated.
- . Assurance that items were placed on cribbing or dunnage, where required, was provided.
- . Material was restaged as required to assure proper support.
- . Deteriorating tags were replaced.

As requested, attached as Exhibit B.5.1 is a copy of QA Manual Section N-13 describing the means for implementing special controls over storage. Paragraph 5.1 contains requirements for such instructions to be in the form of a traveler.

B.7 USNRC Request for Additional Information on Nonconformance 7

The NES response stated that "All of the above have an NES approval quality program...." Provide a copy of the documentation to verify that NES approved the quality program for Pall Trinity and A-Jay Metal.

Additionally, NES did not approve the quality programs of Southern Spring and Stamping, Machinex, Automotive Fasteners, Piedmont Hub, Charlotte Valve & Fitting, B&B Hose & Rubber, Air Products and Advanced Products when these vendors supplied items or services pertain to a defueling canister(s) which is designated as "Important to Safety" for safety related reasons by the customer. Provide copies of the procedures utilized by NES to determine which vendors should have an approved QA program and the rationale by which NES determined that the vendors listed above did not require NES approved QA programs.

NES Manufacturing Response

Pall Trinity (Pall Corporation) supplied filter discs to NES Manufacturing on Purchase Order 3936. These items are considered commercial grade items as indicated on the letters attached in Exhibit B.7.1. Pall Trinity was hence not qualified or audited for nuclear QA program acceptability.

Documentation regarding A-Jay Metals' qualification is attached in Exhibit B.4.2.

As noted in our original response, the procedures used to determine which vendors required a QA Program were inadequate. The rationale used in not requiring a QA Program from the vendors listed (except for Automotive Fasteners) is contained in our response B.4 and 6 herewith. Automotive Fasteners provided fasteners under 1" nominal diameter and were exempted for the same reasons as stated in our response B.4 and 6 herewith.

B.14 USNRC Request for Additional Information on Nonconformance 14

The NES response stated that dimensional inspection had been performed and the Supplier Quality History Logs (SQHL) located. Provide copies of the SQHL for POs 4356 (concrete) and 4404 (lubricant). Your statement that receipt inspection was not performed on the initial shipment of material on PO 4467 until July 22, 1985 is not consistent with the NRC inspector's findings (i.e., two of the ten heads were in the inspection area containing green tags indicating that they had satisfactorily passed receipt inspection). In addition, provide a copy of the SQHL for PO4657 which was not addressed in your response.

NES Manufacturing Response

Attached as Exhibit B.14.1 are SQHLs for Purchase Orders 4356 and 4404 indicating that a "dimensional" check was performed. Questioning of receiving personnel indicates that in the case of the concrete and lubricant, "dimensional" on the SQHL means that weights and quantities were correct.

With respect to the material on Purchase Order 4467, Exhibit B.14.2 contains the receiving department copies of the Purchase Order indicating that on June 3, 1985, NES Manufacturing received ten pieces. This is confirmed by Exhibit B.14.3, a copy of the shipping notice from American GFM. Both the receiving copy of the Purchase Order and the SQHL (Exhibit B.14.4) indicate completion of receiving inspection on July 22, 1985. Although not clear in procedures or well documented, it was permissible to release partial shipment of material by completion of receiving inspection activities on individual items. The green accept tags noted by the inspector were indicative of piece acceptance. Upon completion of all receiving inspection activities for all pieces on the shipment, receiving inspection documentation was completed. Completion of all receiving inspection activities on the first shipment of items on Purchase Order 4467 was completed on July 22, 1985.

A copy of the SQHL for Purchase Order 4657 is attached as requested (Exhibit B.14.5).

B.15 USNRC Request for Additional Information on Nonconformance 15

The NES response stated that the required elements for documentation of receipt inspection are present at NES. The NRC inspector noted that neither the SQHL or the receiving inspection copy of the purchase order adequately documented the results of the inspection (i.e., recorded data). Clarify if the proposed Receiving/Inspection Report will provide for: acceptance and rejection criteria, results of the inspection, and identification of measuring equipment used.

NES Manufacturing Response

The new procedure in effect requires the use of a receiving inspection report to document the activity. The report includes a description of inspection attributes, reference to accept/reject criteria, specifics of rejectable attributes, measuring and test equipment used, acceptance or rejection results, and the signature/date of the inspector/inspection.

B.17 USNRC Request for Additional Information on Nonconformance 17

The NES response stated that this was an isolated case. Provide two copies of travelers containing approved instructions for identifying poison tube assemblies.

NES Manufacturing Response

The Nonconformance as understood by NES Manufacturing was that unapproved instructions were placed in a traveler. This was an isolated instance limited to poison tube marking/identification.

At the time of the first visit of the Inspector, one traveler had been prepared and issued to govern installation of poison in all tubes, traveler 004101. Per specification, this original traveler did not require marking of tubes with batch number of poison installed. The practice of marking tubes was followed for material control but instructions were not added in an approved manner, that is, by traveler entry approved by Quality Assurance. This violated NES Manufacturing procedures as noted by the

inspector. During the inspection (June 12, 1985), provisions for marking poison lot identification on poison tubes were added to travelers in accordance with the procedure. Later, the one traveler was "split" into many travelers. Attached are excerpts from two travelers (Exhibit B.17.1). Traveler 004101T is an in-process traveler, and traveler 004101H is a completed traveler showing marking provisions.



EXHIBIT B.1.1



## MANUFACTURING PLAN AND QUALITY RECORD

# SELAMCO

101 Swing Road Greensboro, North Carolina 27409

## DETAIL TRAVELER

SELAMCO  
GT 5

5-6-85

SHT 1 OF 3

TRAVELER SERIAL NO.  
003934

CHG LTR N.C.	DATE	ANI —	DATE —	PART NO. 1150917	DWG REV 1	N/A W/O NO.	N/A DWG NO.	W.O. NO. 8409180-01
M.E. H	DATE 4-3-84	PRG MGR WD	DATE 4-3-85	PART NAME LOWER HEAD	SERIAL NUMBER	QTY / ASSY	MFG QTY 30	
QA APPR R.F.A.	DATE 4-9-85			CUSTOMER BECHTEL			START DATE ASAP	DUE DATE ASAP

MAT'L TYPE &amp; SIZE / PART

14" O.D. X  $\frac{3}{8}$ " WALL FLANGED & REVERSE DISHED HEAD SA 240 TP 304L

[illegible]

Exhibit B.1.1, P.1 of 4







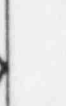
LTR	REVISIONS	LTR	REVISIONS

# SELAMCO

101 Swing Road Greensboro, North Carolina 27409

# TRAVELER

SHEET 2 OF 3

PART NO. 1150917		PART NAME LOWER HEAD		WORK ORDER NO. 8909180'-01		TRAVELER SERIAL NO. 003934			
OPER MACH NO. GROUP	OPERATION DESCRIPTION	DIM	TOL	DWG ZONE	TOOLING	ACTUAL DIM	MFG STAMP	FIRST ART DATE	FINAL INSP DATE
30	TURN WELD PREP ON HEAD PER SKETCH								
	I.D.	13.438 13.500				13.465	4-18-85		4-18-85
	LAND THICKNESS	.10	±.01			.107			4-18-85
	LAND LENGTH	.04	±.01			.037			4-18-85
	BEVEL	10°				10°			4-18-85
	RADIUS	6"	±.01			1/8" RAD.			4-18-85
	HEIGHT	2.34	±.10			2 3/4" W/ 1/16"			* 8-28-85
						PART WAS CHECKED FOR 2 3/4" ± 1/16"			
40	VERIFY OPERATION #30					HEIGHT ON 4-18-85 BUT STAMP WAS OMITTED 8-28-85 CEB			4-30-85
	IDENT & STONE FOR N/A								

# MANUFACTURING PLAN AND QUALITY RECORD

**SELAMCO**

101 Swing Road Greensboro, North Carolina 27409

**TRAVELER**

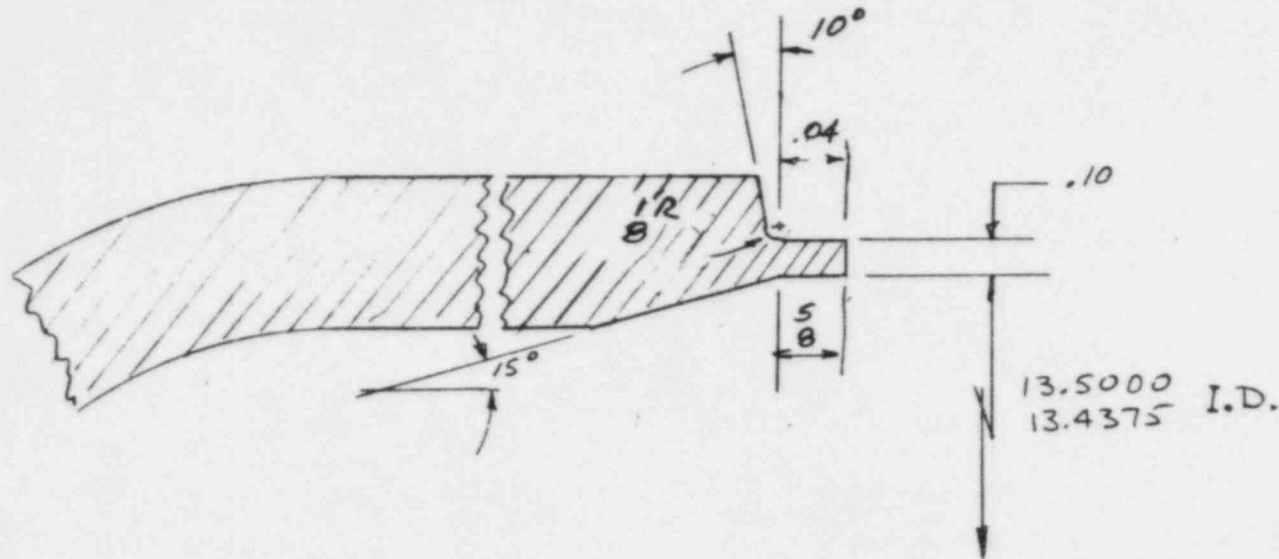
SHEET 3 OF 3

PART NO. 1150917

PART NAME LOWER HEAD

WORK ORDER NO. 8409180-01

TRAVELER SERIAL NO. 003934 -



SKETCH #1

EXHIBIT B.1.1, P.3054

NES/SELAMCO

W/O # 84091 BOPART DESCRIPTION LOWER HEAD 1150917

SERIAL NUMBER	DATE	SERIAL NO.	DATE	SERIAL NO.	DATE
169		170			
45		153			
160		94			
103		13			
8		155			
87					
70					
111			ALL ARE	HEAT CODE	# NSW A
151					
3					
91					
98		— NOTE —			
88		RECONSTRUCTED FROM			
158		I. D. SHEET ATTACHED			
96		TO TRAVELER 84091 BO			
86		MOD 8-22-85			
20					
157					
141					
159					
92					
144					
132					
172					
147					

EXHIBIT B.1.2

# JESSOP STEEL COMPANY

WASHINGTON, PENNSYLVANIA

### CERTIFICATE OF TEST

DATE December 10, 1984

TO : Allied Metals Inc.  
2220 Canada Dry St.  
P. O. Box 18038  
Houston, Texas 77023

SHIPPED  
TO

HACKNEY Iron & Steel  
Hwy 6 South  
Narasota, TX 77868

GENTLEMEN: WE SHIPPED TO YOU VIA \_\_\_\_\_ SHIPPING MEMO # \_\_\_\_\_ MATERIAL LISTED BELOW

Jessop Type 304-L<sup>✓</sup>S/S HRAP ASTM A-240-83, ASME SA-240-W83,  
ANSI N45.2-1971 10CFR21.

HEAT NO.	YOUR ORDER NO.	OUR ORDER NO.	SIZE	QUANTITY
NSWA 20800 ✓	0678	NM5-577660	.375 x 18.5 Dia ✓	173 pcs. ✓ 5363#
Slip 44062				

## NUCLEAR QUALITY ASSURANCE

HEAT NO.	YIELD STRENGTH LBS. PER SQ. IN.	TENSILE STRENGTH LBS. PER SQ. IN.	ELONG. % IN 2"	RED. OF AREA	HARDNESS	BEND	CORROSION	INT. CORROSION	GRAIN SIZE
20800 ✓	36,000 ✓	81,800 ✓	65 ✓	72	B78-79 ✓			OK	

Three Mile Island Unit 2 15737-2-M-101CQ TAG 14339-01

Quality system certificate (Materials) number QSC-245 expires July 23, 1985.  
Material was annealed above 1900° F. and water quenched.

CHEMICAL COMPOSITION (WHEN CALLED FOR BY SPECIFICATION)												Nit.
HEAT NO.	C.	Mn.	P.	S.	Si.	Ni.	Cr.	Mo.	Co.	Ti.	Cu.	<del>Al.</del>
20800✓	.012✓	1.70✓	.033✓	.006✓	.43✓	8.84✓	18.15✓	.27	.14		.24	.093✓

DECLARED TO UNDER OATH BEFORE ME

DAY OF 19

JESSOP STEEL COMPANY

BY

AUTHORIZED SIGNATURE \_\_\_\_\_

W.O. #84091

P/N 1150917

2-12-85

MEETS ASME SA-240-W83 SPECS.

PAGE 19 OF

DECLARATION



# JESSOP STEEL COMPANY

WASHINGTON, PENNSYLVANIA

BULK HEADS & UPPER  
CLOSURE HEAD  
CERTIFICATE OF TEST

January 25, 1985

DATE

TO: Allied Metals Inc  
2220 Canada Dry St.  
P. O. Box 18033  
Houston, TX 77023

SHIPPED TO: N E S Mfg.  
101 Swing RD  
Greensboro NC 27409  
Attn Ed Powell

GENTLEMEN: We shipped to you via \_\_\_\_\_ SHIPPING MEMO \_\_\_\_\_ MATERIAL LISTED BELOW:

Jessop Type 304-L S/S HRAP ASTM A-240-83, ASME SA-240-W33  
ANSI N45.2-1971 10CFR21.

HEAT NO.	YOUR ORDER NO.	OUR ORDER NO.	SIZE	QUANTITY
33573✓	0678	NM4 577561	3.25 x 14.5 Dia 6778	Slip 44064
33579✓			4.25 x 14.5 Dia 5233	Slip 44067
20794✓			4.25 x 14.5 Dia 4227	Slip 44066
33577✓			4.25 x 14.5 Dia 2623	Slip 44065
20840✓			4.25 x 14.5 Dia 2629	Slip 91544

3-21-85 (C.F.M.)  
(FOR CANISTER UPPER HEADS & BULKHEADS)  
MEETS ASME SA-240-WB3 specs.

NUCLEAR QUALITY ASSURANCE

HEAT NO.	YIELD STRENGTH LBS. PER SQ. IN.	TENSILE STRENGTH LBS. PER SQ. IN.	ELONG. % IN 1"	RED. OF AREA	HARDNESS	BEND	CORROSION	INT. CORROSION	GRAIN SIZE
33573✓	32,300✓	77,200✓	68✓	77	BHN156✓			OK	
33579✓	34,600✓	79,500✓	68✓	81	BHN159✓			OK	
20794✓	33,500✓	79,700✓	70✓	81	BHN156✓			OK	
33577✓	33,900✓	73,500✓	70✓	80	BHN159✓			OK	
20840✓	35,300✓	78,800✓	70✓	77	BHN163✓			OK	

THREE MILE ISLAND UNIT 2 15737-1 10CFR TAG NO 14339-03 (4.25)  
TAG NO 14439-02 (3.25)

Quality system certificate (No. 10000) number QSC245 expires July 23, 1985.  
Material was annealed above 1900°F and waterquenched/

HEAT NO.	C.	Mn.	P.	S.	Si.	Ni.	Cr.	Mo.	Co.	Ti.	Cu.	Other
33573✓	.017✓	1.69✓	.033✓	.003✓	.39✓	8.77✓	13.27✓	.34✓	.17✓		.22✓	.088✓
33579✓	.013✓	1.73✓	.033✓	.002✓	.45✓	8.32✓	13.50✓	.32✓	.16✓		.19✓	.030✓
20794✓	.023✓	1.76✓	.031✓	.003✓	.47✓	8.93✓	13.37✓	.32✓	.17✓		.20✓	.036✓
33577✓	.013✓	1.70✓	.033✓	.003✓	.53✓	8.81✓	13.25✓	.23✓	.16✓		.19✓	.036✓
20840✓	.024✓	1.60✓	.034✓	.017✓	.54✓	8.92✓	13.31✓	.33✓	.13✓		.28✓	.091✓

DECLARED TO UNDER OATH BEFORE ME

THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 19 \_\_\_\_\_

BY \_\_\_\_\_ AUTHORIZED SIGNATURE

QA APPROVED

BY: Allan McConnell DATE: 2-21-85  
ALLAN McCONNELL

GUYON ALLOYS, INC.

THIS MATERIAL HAS BEEN PRODUCED TO, AND CONFORMS TO APPLIED SPECIFICATIONS.

BECHTEL  
633

INSPECTED

# JESSOP STEEL COMPANY

WASHINGTON, PENNSYLVANIA

UPPER CLOSURE HEADS  
 CERTIFICATE OF TEST  
 EXHIBIT B.1.2, p. 3 OF 5

TO Allied Metals Inc.  
 2220 Canada Dry St.  
 P. O. Box 18038  
 Houston, TX 77023

SHIPPED  
 TO

W E S Mfg.  
 101 Swing Rd.  
 Greensboro NC 27400  
 Attn: Ed Powell

DATE

GENTLEMEN: We shipped to you via \_\_\_\_\_ SHIPPING MEMO # \_\_\_\_\_ MATERIAL LISTED BELOW

Jessop Type 304-L S/S WRAP ASTM A-340-83, ASME SA-240-83  
 ANSI B45.3-1971 10CFR21

HEAT NO.	YOUR ORDER NO.	OUR ORDER NO.	SIZE	QUANTITY
33577	067C	HM4-577661	4.250 x 14.5 DIA	27 Pcs. Slip 44063
33579			4.250 x 14.5 DIA	27 Pcs. Slip 44067
30794			4.250 x 14.5 DIA	45 Pcs. Slip 44065

NUCLEAR QUALITY ASSURANCE

HEAT NO.	YIELD STRENGTH LBS. PER SQ. IN.	TENSILE STRENGTH LBS. PER SQ. IN.	ELONG. % IN 1"	RED. OF AREA	HARDNESS	BEND	CORROSION	INT. CORROSION	GRAIN SIZE
33577	33,900	70,500	70	80	HRC130			OK	
33579	34,600	70,100	68	81	HRC130			OK	
30794	32,300	70,700	70	81	HRC136			OK	

THREE MILE ISLAND UNIT 2 15737-3-B-181CQ TRS NO. 14120-03

Quality system certificate (Materials) number QSC-245 expires July 23, 1986.  
 Material was annealed above 1900° F. and water quenched.

## CHEMICAL COMPOSITION (WHEN CALLED FOR BY SPECIFICATION)

HEAT NO.	C.	Mn.	P.	S.	Si.	Ni.	Cr.	Mo.	Co.	Ti.	Cu.	CADMIUM
33577	.013	1.70	.013	.003	.38	8.81	18.23	.23	.16		.29	.006
33579	.018	1.73	.013	.002	.43	8.82	18.36	.32	.16		.29	.008
30794	.023	1.76	.011	.003	.67	8.93	18.37	.32	.17		.28	.006

DECLARED TO UNDER OATH BEFORE ME

THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 19\_\_\_\_

JESSOP STEEL COMPANY  
 BY *John H. O'Connor*  
 AUTHORIZED SIGNATURE



6-485  
 W.O. # 84091

TECHTEL  
 354

RW  
 1-17-85

INSPECTED

THIS MATERIAL HAS BEEN PRODUCED TO, AND CONFORMS TO APPLIED SPECIFICATIONS.





**Atomic Energy  
of Canada Limited**  
Research Company  
Chalk River  
Nuclear Laboratories

**L'Énergie Atomique  
du Canada, Limitée**  
Société de Recherche  
Laboratoires Nucléaires  
de Chalk River

EXHIBIT B.1.2, p. 5 of 5

Chalk River, Ontario  
Canada K0J 1J0  
Telephone: 613-584-3311  
Telex: 053-34555  
Cable Address: "MOTA"  
Telecopier: 613-589-2039

COMMERCIAL OPERATIONS  
Research Contracts

1984 December 21

T. Harman Jr.  
Project Manager  
NES Manufacturing  
101 Swing Rd.  
GREENSBORO, North Carolina  
27409

RECEIVED

DEC 27 1984

NES MANUFACTURING

Dear Mr. Harmon:

Silicone Coated Recombiner Catalyst  
for TMI-2 Defuelling Cannisters  
Certificate of Compliance

We hereby certify that the above-noted catalyst for Bechtel job #15737 purchase order #TC016181 meets the specifications as follows:

The catalyst shall be spherical-shaped particles, 1/4 inch ( $\pm 1/8$  inch) in diameter. The seller shall provide written certification for the following:

- a) The catalyst consists of a base material of silica with a minimum of 0.14 weight percent of platinum.
- b) The catalyst has less than 5 ppm content of chlorine/fluorine.
- c) All physical and chemical properties shall be essentially identical to those of samples shipped to Rockwell Hanford Operations in October 1983 for testing.
- d) The catalyst particles shall have sufficient structural strength to withstand normal handling and loading without crumbling.

The shipment dated 1984 December 12 contains 5.15 kg with the balance of 5.85 kg to follow early in 1985 January.

Yours sincerely,

*R.J. Quaiattini*

R.J. Quaiattini  
Project Manager

*W.J. Langford*

W.J. Langford  
QA Manager

W.A. Seddon  
Business Development Officer

WAS:E

P.N. 1150972A



8-6-85

W.O. # 84091

TC 016181

BECHTEL  
354

PAGE 20 OF

EXHIBIT B.4.2

NUCLEAR ENERGY SERVICES, INC.  
SHELTER ROCK ROAD  
DANBURY, CONNECTICUT 06810  
(203) 796-5000  
Writer's direct number 796-  
Inter-Office Correspondence

Ref. No.: NQA-725

Date: February 11, 1983  
To: S. Foote  
T. Kanakos  
From: W. S. Gall *W. S. Gall*  
Subject: Approved Vendors List

Please be advised that the following vendor is conditionally approved as a supplier of calibration block material:

A-Jay Metals, Inc.  
75 Kitts Lane  
Newington, CT 06111

To maintain this vendor on the Approved Vendors List, it is required that personnel performing receipt inspection of the material submit a copy of the CMTR's to the QA Department. The CMTR should reference the purchase order and include an indication that the material was either accepted or rejected, and initialed and dated by personnel performing the receipt inspection.

If you have any questions, please call.

WSG/lap

cc M. Alling  
M. Dizdul  
T. Morris

NUCLEAR ENERGY SERVICES, INC.  
SHELTER ROCK ROAD  
DANBURY, CONNECTICUT 06810  
(203) 748-3581

Inter-Office Correspondence

Ref. No.: NQA-723

Date: February 11, 1983  
To: W.S. Gall  
From: M.J. Dizdul *MJD*  
Subject: Qualification of A-Jay Metals, Inc.  
as an Approved Vendor

Based on a QA review of the A-Jay Metals manual, it is recommended that A-Jay be placed on the Approved Vendor List (AVL). It was determined from this manual review that A-Jay can supply materials with Certified Material Test Reports.

MJD/lap



SHELTER ROCK ROAD  
DANBURY, CONNECTICUT 06810  
(203) 796-5000  
Inter-Office Correspondence

To: Distribution

Date: September 27, 1984

From: T. A. Schneider *T.A. Schneider*

Business Unit: Engineering and  
Technical Services

Subject: Approved Vendors List  
September/October, 1984

No.: NQA-1527

Reference:

Attached please find the latest revision of the Approved Vendors List (AVL) to be used in conjunction with procurement in regard to Category 1 and 2 items for your information and use. This AVL is to be distributed to personnel in your department that will be performing procurement activities.

TAS/lap  
Attachment

Distribution:	D. Ackert	E. Giorgio	B. Rall
	J. Allanach	G. Griffiths	R. Ramsey
	M. Alling	A. Gundersen	P. Ryan
	P. Barry	G. Hamilton	D. Saintsing
	T. Bechard	T. Koch	K. Schmidt
	B. Bevard	H. Larson	L. Schuk
	L. Brundage	W. Manion	S. Travella
	R. Burns	F. Martsen	F. Trejo
	C. Cowfer	W. Masetti	K. Trinklein
	J. Dalton	J. May	A. Uziel
	M. Define	T. McMahon	M. Weiner
	M. Dizdul	R. Milos	R. Zemper
	E. Doubleday	T. Morris	L. Zezza
	V. Ferretti	J. Munson	G. Zuk
	R. Gilbert	D. Olson	

**APPROVED VENDORS LIST - SEPTEMBER/OCTOBER 1984**  
**INDEX OF PRODUCT/SERVICE AND APPROVAL CODES**

**PRODUCT/SERVICE CODE**

	CODE		CODE
<b>CALIBRATION BLOCKS-</b>	<b>CB</b>	<b>CALIBRATION &amp; TEST LABS-</b>	<b>CT</b>
Material Supplier	01	Chemical Testing	01
Welding	02	Physical Testing	02
Heat Treatment	03	Metallurgical Testing	03
Fabrication (Machining)	04	Measuring Instrument/	
Weld Wire/Rods/		Calibration Repair	04
Electrodes Supplier	05	Test Equipment/Supplies	05
Bolts/Studs Supplier	06	NDE Equipment Repair	06
<b>EQUIPMENT-</b>	<b>EQ</b>	<b>MISCELLANEOUS-</b>	<b>MS</b>
UT Inst. Supplier	01	Manuf./Inst./Inspect.	
MT Inst. Supplier	02	KEMYC Fire Barrier Sys.	01
RT Inst. Supplier	03	Manuf. Neutron Absorbing	
Transducers/Wedges	04	Material	02
Thermometers	05	Demineralizing Tank	03
Cal. Standards/		Fab. Cal. Block Stands &	
Instruments	06	Utility Carts	04
Radio. Source	07	Engineering Services	05
<b>CONSUMABLES-</b>	<b>CN</b>	NDE Procedures/Personnel	
UT, LP, MT Materials--*	01	Services	06
RT Film/Chemicals/		Computer Services	07
Supplies--**	02	Fabricated Hardware	08
X-Ray Supplies	03		
General NDE Supplies	04		
*-- (Magnaflux, Echo Labs, Parker, Sherwin)			
**-- (Kodak, Dupont, Bevaert)			

**APPROVAL CODE**

	CODE	
*Audit-	A	A=Audit at Least Once Every
**Receipt Inspection	R	Three Years
Industry Acceptance	I	
ASME Certification of		
Authorization	S	
	C	
*Audits required for: CB-02		
	CT-01, 02, 03, & 04	
	MS-01, 02, 05, & 06	
**Receipt Inspection required for: CB-01, 03, 04, 05, & 06		
	CN-01, 02, 03, & 04	
	CT-05, 06	
	EQ-01, 02, 03, 04, 05, 06, & 07	
	MS-03, 04, 07, & 08	

*Conditional upon  
Acceptable Receipt Insp?*



PAGE NO. 00001  
09/26/84

## NES APPROVED VENDORS LIST - SEPTEMBER/OCTOBER 1984

VENDOR =====	PROCUREMENT CATEGORY =====	DATE REEVALUATED =====	PRODUCT/ SERVICE CODE =====	APPROV. CODE =====	COMMENTS =====
ACME WELDING DEPT. ONE CARNEY RD. W.HARTFORD, CT 06110	2	9/26/84	CB-02 CB-03	A/R	
AEROTECH LABORATORIES LEWISTOWN, PA	2	9/26/84	EQ-04	R	
A-JAY METALS, INC. 75 KITTS LANE NEWINGTON, CT 06111	2	9/26/84	CB-01	R	
V.O. BAKER DIST. CO. P.O. BOX 55 MENTOR, OHIO 44060	2	9/26/84	CN-01	R	
B&B PROMATEX, INC. P.O. BOX 2531 HOUSTON, TX 77252	1,2,&3	9/26/84	MS-01	A/R	FORMERLY B&B INSULATION
BONNEY FORGE 201 W. MOUNTS ST PO BOX 468 CARLINVILLE, IL	2	9/26/84	CB-01	R	
BRANDS IND. SERVICE COMPANY (BISCO) PARK RIDGE, IL	1	9/26/84	MS-02	A/R	QUALIFIED BY SURVEY & AUDITS QAA-242 & 209
BUFFALO X-RAY 81-83 EAST MARKET BUFFALO, NY	2	9/26/84	CN-03	R	
CONAM INSPECTION 660 SO. 31ST. RICHMOND, CALIF. 94804	1&2	9/26/84	MS-06	A	QUALIFIED BY SURVEY QAA-238
CONAM INSPECTION CHICAGO, ILLINOIS	1&2	9/26/84	MS-06	A	QUALIFIED BY AUDIT 272
CONAM INSPECTION FOLCROFT, PA.	1&2	9/26/84	MS-06	A	CONDITIONALLY QUALIFIED BY QAA-281 9/19/84
CONN. CALIBRATION LABS 600 MAIN ST. MONROE, CT.	2	9/26/84	CT-06	R	QUALIFIED BY SURVEY QAA-259
CONTAINER PRODUCTS PO BOX 3767 WILMINGTON, N.C.	2	9/26/84	MS-08	R	





To: Distribution

Date: March 28, 1985

From: T. A. Schneider *T.A. Schneider*Business Unit: Engineering and  
Technical Services

Subject: Approved Vendors List - Revision 1 - 1985

No.: NQA-1717

## Reference:

Attached please find the latest revision (Revision 1 - 1985) of the Approved Vendors List (AVL) to be used in conjunction with procurement in regard to Category 1 and 2 items for your use. This revision supercedes the September/October, 1984 version. This AVL is to be distributed to personnel in your department that will be performing procurement activities.

TAS/lap  
Attachment

Distribution:	D. Ackert	G. Griffiths	D. Olson
	J. Allanach	A. Gundersen	B. Rall
	M. Alling	G. Hamilton	R. Ramsey
	T. Bechard	R. Hypes	P. Ryan
	B. Bevard	T. Koch	K. Schmidt
	L. Brundage	H. Larson	L. Schuk
	R. Burns	L. Ludwig	F. Sugar
	C. Cowfer	W. Manion	F. Trejo
	J. Dalton	F. Martsen	K. Trinklein
	M. Define	W. Masetti	A. Uziel
	M. Dizdul	J. May	M. Weiner
	E. Doubleday	T. McMahon	L. Zezza
	R. Gilbert	J. Munson	G. Zuk
	E. Giorgio	D. Nuzzo	

PAGE NO. 00001  
03/27/85

NES APPROVED VENDORS LIST -1985 REVISION 1 - ISSUED MARCH 27,1985

VENDOR =====	PROCUREMENT CATEGORY =====	DATE OF LAST SAT. ORDER =====	PRODUCT/ SERVICE CODE =====	APPROVAL CODE =====	COMMENTS =====
AEROTECH LABORATORIES LEWISTOWN,PA	2	8/21/84	EQ-04	R	
A-JAY METALS, INC. 7C KITTS LANE NEWINGTON,CT 06111	2	8/24/84	CB-01	R	
BARZETTI'S WELDING 143 PLAIN RD. BETHEL,CT.	2	2/6/85	CB-02	R	REINSTATED BASED ON QUALITY HISTORY
B&B PROMATEK,INC. P.O.BOX 2531 HOUSTON,TX 77252	1,2,3	4/13/84	MS-01	A/R	FORMERLY B&B INSULATION
BRANDS IND. SERVICE COMPANY(BISCO) PARK RIDGE,IL	1	11/12/84	MS-02	A/R	QUALIFIED BY SURVEY & AUDITS QAA-242 &209
BRUEL & KJAER WEST CALDWELL,N.J.	2	N/A	EQ-06	R	NEW VENDOR CONDITIONAL
CENTURY TOOL & DESIGN MILDALE,CT.	2	N/A	MS-08	R	NEW VENDOR CONDITIONAL
CONAM INSPECTION 660 SO.31ST. RICHMOND,CALIF.94804	1&2	N/A	MS-06	A	QUALIFIED BY SURVEY QAA-238
CONAM INSPECTION CHICAGO,ILLINOIS	1&2	N/A	MS-06	A	QUALIFIED BY AUDIT 272
CONAM INSPECTION FOLCROFT,PA.	1&2	N/A	MS-06	A	QUALIFIED BY AUDIT QAA-281
CONN. CALIBRATION LABS 600 MAIN ST. MONROE,CT.	2	N/A	CT-06	R	QUALIFIED BY SURVEY QAA-259
CONTAINER PRODUCTS PO BOX 3767 WILMINGTON,N.C.	2	5/15/84	MS-08	R	
CAYO-DYNE PAYNE ROAD DANBURY,CT	2	10/8/84	CB-05 CW-01	R	

EXHIBIT B.5.1