

THE BABCOCK & WILCOX COMPANY
POWER GENERATION GROUP

To

DISTRIBUTION NEQA-7

From

PROCEDURES & PROPOSALS GROUP
D. W. JACOBS - N.E. QUALITY ASSURANCE PRODUCT QUALITY

9CS 663-5

Cust.

CONTAMINATION CONTROL PROGRAM

File No.
or Ref.

Subj.

RED & BLUE LISTS

Date

DECEMBER 16, 1975

This letter to cover one customer and one subject only.

Attached for your use is Revision 14 of the Red and Blue Lists.

The following product will be deleted from the next revision of the Red and Blue Lists unless a request to the contrary is received from users of the Lists:

Paint - Stencil, Red - C-9208 Red
(Randolph Products)

All requests for additions and/or deletions to the Red and Blue Lists should be made in writing to the writer, D. W. Jacobs, Product Quality, Quality Assurance NED.

All requests for changes in address should also be made to D. W. Jacobs.

Please forward your comments to the writer by March 1, 1976, if possible, so that they may be incorporated into the next revision of the Red and Blue Lists.

D. W. Jacobs

DWJ:rh

000183

R E D L I S T

The following listed consumable materials are approved for their intended use on component surfaces anytime. (See Figure I attached)

All restrictions specified in Sections 9 and 10 of 12-1-QP-6 also apply.

Only consumable materials marked with an asterisk (*) may be used on surfaces containing crevices or inaccessible areas.

Products marked "(CUO)" are for Commercial use only.

Note to Requisitioners and Purchasing

Table C-7 (Certificate of Conformance) shall be required for all consumable materials purchased to categories 1, 2, 3 and 4. (See 12-1-QP-5)

R E D L I S T

Categories of Consumable Materials

- Category 1: Consumable materials for use at any stage of fabrication which require special chemical composition limits.
- Category 2: Consumable materials required to be purchased to federal or military specification requirements.
- Category 3: Consumable materials to be purchased to other special order requirements of Nuclear Equipment.
- Category 4: Materials requiring that they be purchased with the requirement that they contain no more than 10 ppm of Mercury.

RED LIST

PRELIMINARY

HEAT TREATMENT

(FORMING, NORMALIZING, ETC.)

INTERMEDIATE

HEAT TREATMENT

FINAL

HEAT TREATMENT

WELDING

FABRICATION FLOW

SHIPMENT

FINAL

CLEANING

INTERMEDIATE

CLEANING

INTERMEDIATE

CLEANING

INTERMEDIATE

CLEANING

INTERMEDIATE

CLEANING



RED LIST



BLUE LIST

FIGURE #1

RED LIST

<u>Acetone</u>				
Cleaning:	*Acetone (Ashland Chemical)	1	O-A-51	891081
<u>Alcohol</u>				
Ethyl	*Ethyl Alcohol (Ashland Chemical)	2	O-E-760	QA-TR-0087
Isopropyl	*Isopropyl Alcohol (Ashland Chemical)	2	TT-I-735	QA-TR-0088
<u>Asbestos</u>				
Cloth	#1228 (1/16" x 40" x 150') (John Manville)	1		512079
<u>Cardboard</u>				
Sheets	(36" x 66") (John Roher)	1		
<u>Cloth</u>				
Filter	*(Lamparts Co)	1,2,3	AST-D-1910-64	
Patches, Linen	*3" x 5" (Lamparts Co)	1,3	12-1-MR-10	
Wiping, Lint Free	*(Louis Halprin & Sons)	1,3	12-1-MR-10	890150
<u>Gycon</u>				
Soapstone	Superior Talc (3/16" x 1/2" x 5") (St. Louis Crayon & Handle)	1		891570
	Superior Talc (1/4" round x 5") (St. Louis Crayon & Handle)	1		
	Thin Cut (1/16" x 1/2" x 5") (George E. Mattos Co)	1		
<u>Detergent</u>				
Liquid	Tergitol #15-S-9 (Union Carbide)	2	NIL-D-16791	QA-TR-0119
Powder	Trisodium Phosphate Anhydrous (Ashland Chemical)	2	O-S-642	
	Trisodium Phosphate Dodecahydrate (Ashland Chemical)	2	O-S-642	QA-TR-0118

RED LIST

R-2

Dye, Marking

Black	Micro Supreme #104	(Michigan Chrome & Chem)	1
Blue	Micro Supreme #134	(Michigan Chrome & Chem)	1
Purple	Micro Supreme #142	(Michigan Chrome & Chem)	1

Foil

Aluminum	Aluminum Foil (.002" x 36" x 100")	(Alcan Metallic Div)
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Gas

Argon	*Argon - bulk (Airco)	3	12 1-MR-13	QA-TR-0089
	*Argon - cylinder (Linde Corp)	2,3	12 1-MR-13	892940
			MIL-A-18455	
Argon (75%)/CO ₂ (25%)	* (UCC Linde Corp)	2	BD-C-101	892985
Carbon Dioxide	* (Cardox Corp)			892950
Helium (75%)/Argon (25%)	* (UCC Linde Corp)	2	BB-N-411	892970
Nitrogen	* (UCC Linde Corp)	2	BB-N-411	QA-TR-0090
Nitrogen, (Liquid)	* (Akron Oxygen)			

Gaskets

Asbestos/Metal	(Ohio Gasket)	1,2	MIL-G-21032
	(Flexatatic Gasket)	1,2	MIL-G-21032

Gasket Material

Compressed Asbestos	#226 White (1/8" x 50" x 50") (Nicolet Ind)	1	526525
	Creanite (1/32" x 60" x 63") (Nicolet Ind)	1	526541
	Creanite (1/16" x 60" x 63") (Nicolet Ind)	1	526586
	Creanite (1/8" x 60" x 63") (Nicolet Ind)	1	
	Navy Style #2150 (John Manville)	1	512118
Asbestos Millboard	#106 (1/8" x 42" x 48") (John Manville)	1	512120
	#106 (1/4" x 42" x 48") (John Manville)	1	512122
	#106 (1/2" x 42" x 48") (John Manville)	1	

Electrochemical Etch Material

Electrolyte	Formula #SC-44 (The Electromark Corp)	1
	Formula #10 (The Electromark Corp)	1
	Formula #353 (The Electromark Corp)	1
Cleaner	Neutra lye (The Electromark Corp)	1
	Neutra lye (The Electromark Corp)	1

RED LIST

R-3

Ink, Stenciling

Nonporous	Black (Sackman Stamp)	1,2	TT-I-558	QA-TR-0101
	Red (Sackman Stamp)	1,2	TT-I-558	QA-TR-0102
Porous	White (Sackman Stamp)	1,2	TT-I-558	QA-TR-0103
	Black (Sackman Stamp)	1,2	TT-I-559	QA-TR-0104
	Red (Sackman Stamp)	1,2	TT-I-559	QA-TR-0105
	White (Sackman Stamp)	1,2	TT-I-559	QA-TR-0106

Insulation

Blanket, Fiber	Kaowool ($\frac{1}{2}$ " x 48" x 280") (Babcock & Wilcox)	1,2	MIL-I-24244	512002
	Kaowool (1" x 24" x 280") (Babcock & Wilcox)	1,2	MIL-I-24244	512001

Lubricant

Hot Forming	Cerma-Guard #35 (A.O. Smith)	1		
Thread	Hot Forming Agent #205 (E.F. Houghton)	1		
	*Neolube (Huron Industries)	1,2	MIL-L-24131	QA-TR-0096
	Red Lead & Graphite (Graphite Products)	2	MIL-L-24479	QA-TR-0095
	Silver Goop (Crawford Fitting Co)			
	*Lube-a-Tube KS (G. Whitfield Richards)	1		QA-TR-0065

Markers

<u>Felt Tip</u>	Black	1,3	12-1-MR-8	891592
	Blue	1,3	12-1-MR-8	891590
	Red	1,3	12-1-MR-8	891593
	Yellow	1,3	12-1-MR-8	891591
<u>Paint</u>	White	1		QA-TR-0066
	Yellow	1		QA-TR-0067

Molykote

Thread Lubricant	Molykote Z (Dow Corning)	1,2	MIL-M-7866	330047
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Oil

Preserving

P-2	Valvoline, Tectyl #502-C (Ashland Petroleum)	1,2	MIL-C-16173
P-3	Rust Preventative #1612-A (Franklin Oil Co)	1,2	MIL-C-16173
P-19	Valvoline, Tectyl #894 (Ashland Petroleum)	1,2	MIL-C-16173
	Rust Foil #161-3 (Franklin Oil Co)	1,2	MIL-C-16173
	Valvoline, Tectyl #846 (Ashland Petroleum)	1,2	MIL-C-16173
	Rust Foil #161-4 (Franklin Oil Co)	1,2	MIL-C-16173

Pad

Kneeling	Fiberlock (1/2" x 24" x 30") (Field Abrasive Mfg)	1	893825
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Paint

Aluminite
Aluminum

Dexaluminite (Special Products)	2	893870
C-90-S-C-18 III Heat Aluminum (Sherman Williams)	2	893856
H4-K-49 (National Lead)		330002

Enamel

(Randolph Products)	1,2	MIL-E-5557
#719 Grey (Akron Paint & Varnish)	1	

Layout

LR-6703 (Akron Paint & Varnish)	1	
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Pipe Oil

Preservative

LD-9098 (Humble Oil (CUO))	1	894370
U-250-GFS (Steward Brothers (CUO))	1	894370

Stencils

C-9208 Red (Randolph Products)	1	
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REP LIST

R-5

<u>Paper</u>			
Oil	(Specialty Products)	1	
Water Proof	Ordinance Wrap (Marvellum Co)	1,2	MIL-B-121 450257
<u>Plastic</u>			
Liquid	Dip Seal #D.S. 300-Green (Dip Seal Plastics)	1	
Rigid	9034-111 Lexan (General Electric)	1	QA-TR-0074
	9034-112 Lexan (General Electric)	1	QA-TR-0125
<u>Polyethylene</u>			
Bags	(Bergman Bag Co)	2	MIL-P-24466
Protectors	(Unknown)	2	MIL-P-24466
Sleeves	Poly net (IKM Corp)	1	
Sleeves	(Unknown)	2	MIL-P-24466 QA-TR-0126
<u>Protect-O-Metal</u>			
Anti Weld Spatter	Protect-O-Metal #2 (G.W. Smith & Sons)	3	12-1-MR-7 530001
<u>Refractory</u>			
Chrome Ore	Plastic Chrome Ore (Dabcock & Wilcox)	1	512078
<u>Rust Inhibitor</u>			
Hydrotest	Immunol #1392 (Harry Miller Corp)	1	
<u>Sheeting</u>			
Polyethylene	Green Polyethylene (.006" x 30" x 350')		
	(St. Louis Paper & Box)	2	MIL-P-24466 893968

Solvent

Cleaning	AL-305 (Solventol Corp)	1	
	Stoddard Solvent (Standard Oil)	1,2	P-D-680

Spraylat

Stripable Coating	SC-1074-B-2 Base (Spraylat Corp)	1,2	MIL-C-6799
	SC-1090-1 Top Coat (Spraylat Corp)	1,2	MIL-C-6799
			450002
			450003

Type

Multiclass	Green Mystic (Borden)	1	894645
Aluminum	#425 Aluminum (Scotch)		
Pressure Sensitive	White #7020 Mystic (2" x 180') (Borden)	1	530375
	#480 (3M) (CUO)	1	
	#850 (3M) (CUO)	1	
	#898 Hi Star (3M) (CUO)	1	
	E-10 Transox (John Manville) (CUC)	1	
	E-12 Transox (John Manville) (CUO)	1	
	#222 Polyken (Kendall Co) (CUO)	1	

Tempilstick

Crayon

125° Tempilstick	(Tempil Corp)	1	890036
131° Tempilstick	(Tempil Corp)	1	890037
144° Tempilstick	(Tempil Corp)	1	890038
150° Tempilstick	(Tempil Corp)	1	890001
156° Tempilstick	(Tempil Corp)	1	890039
163° Tempilstick	(Tempil Corp)	1	890040
169° Tempilstick	(Tempil Corp)	1	890045
175° Tempilstick	(Tempil Corp)	1	890046
182° Tempilstick	(Tempil Corp)	1	890047
188° Tempilstick	(Tempil Corp)	1	890048
194° Tempilstick	(Tempil Corp)	1	890049
200° Tempilstick	(Tempil Corp)	1	890002
206° Tempilstick	(Tempil Corp)	1	890051
213° Tempilstick	(Tempil Corp)	1	890052
219° Tempilstick	(Tempil Corp)	1	890053
225° Tempilstick	(Tempil Corp)	1	890054

RED LIST

Tempilstick

Crayon

R-7

231° Tempilstick (Tempil Corp)	1	890055
238° Tempilstick (Tempil Corp)	1	890056
244° Tempilstick (Tempil Corp)	1	890057
250° Tempilstick (Tempil Corp)	1	890063
256° Tempilstick (Tempil Corp)	1	890058
263° Tempilstick (Tempil Corp)	1	890059
269° Tempilstick (Tempil Corp)	1	890061
275° Tempilstick (Tempil Corp)	1	890062
282° Tempilstick (Tempil Corp)	1	890063
294° Tempilstick (Tempil Corp)	1	890064
300° Tempilstick (Tempil Corp)	1	890064
306° Tempilstick (Tempil Corp)	1	890065
319° Tempilstick (Tempil Corp)	1	890066
325° Tempilstick (Tempil Corp)	1	890067
331° Tempilstick (Tempil Corp)	1	890068
338° Tempilstick (Tempil Corp)	1	890069
344° Tempilstick (Tempil Corp)	1	890071
350° Tempilstick (Tempil Corp)	1	890065
363° Tempilstick (Tempil Corp)	1	890072
375° Tempilstick (Tempil Corp)	1	890073
388° Tempilstick (Tempil Corp)	1	890074
400° Tempilstick (Tempil Corp)	1	890066
413° Tempilstick (Tempil Corp)	1	890075
425° Tempilstick (Tempil Corp)	1	890076
438° Tempilstick (Tempil Corp)	1	890077
450° Tempilstick (Tempil Corp)	1	890077
463° Tempilstick (Tempil Corp)	1	890078
475° Tempilstick (Tempil Corp)	1	890079
500° Tempilstick (Tempil Corp)	1	890068
625° Tempilstick (Tempil Corp)	1	890035
675° Tempilstick (Tempil Corp)	1	890081
750° Tempilstick (Tempil Corp)	1	890021
850° Tempilstick (Tempil Corp)	1	890082
900° Tempilstick (Tempil Corp)	1	890010
932° Tempilstick (Tempil Corp)	1	890083
950° Tempilstick (Tempil Corp)	1	890011
977° Tempilstick (Tempil Corp)	1	890084
1000° Tempilstick (Tempil Corp)	1	890012
1022° Tempilstick (Tempil Corp)	1	890085
1050° Tempilstick (Tempil Corp)	1	890013
1100° Tempilstick (Tempil Corp)	1	890014

RED LIST

R-8

Tempilstick

Crayon	1150° Tempilstick (Tempil Corp)	1	890015
	1200° Tempilstick (Tempil Corp)	1	890016
	1250° Tempilstick (Tempil Corp)	1	890017
	1300° Tempilstick (Tempil Corp)	1	890018
	1350° Tempilstick (Tempil Corp)	1	890019
	1400° Tempilstick (Tempil Corp)	1	890020

Trichloroethane

Cleaning	Trichloroethane (Dow Chemical)	2	MIL-T-81533	891082
	Trichloroethane (IPG)	2	MIL-T-81533	891082

Trichloroethylene

Cleaning	Trichloroethylene (Dow Chemical)	2	O-T-634
	Trichloroethylene (IPG)	2	O-T-634

Trichlorotrifluoroethane

Cleaning	*Freon FCA-Type 1 (Dow Chemical)	2	MIL-C-81302
	*Freon FCA-Type 1 (IPG)	2	MIL-C-81302

Water

Deionized	*Grade B (Dabcock & Wilcox)	2	MIL-STD-767
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Wire

Thermocouple	Chromel Alumel (Muskings Mfg Co)	1
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B L U E L I S T

The following listed consumable materials are approved for use prior to intermediate cleaning in preparation for hot forming, heat treatment, welding, or other operations raising surface temperature over 600°F, and also prior to final cleaning. (See Figure I attached)

All restrictions specified in Sections 9 and 10 of 12-1-QP-4 also apply.

Note to Requisitioners and Purchasing

Tape C-7 (Certificate of Conformance) shall be required for all consumable materials purchased to Categories 1, 2, 3 and 4. (See 12-1-QP-5)

Products marked "(CUO)" are for Commercial use only.

B L U E L I S T

Categories of Consumable Materials

Consumable materials for use at any stage of fabrication which require special chemical composition limits.

Category 1:

Consumable materials required to be purchased to federal or military specification requirements.

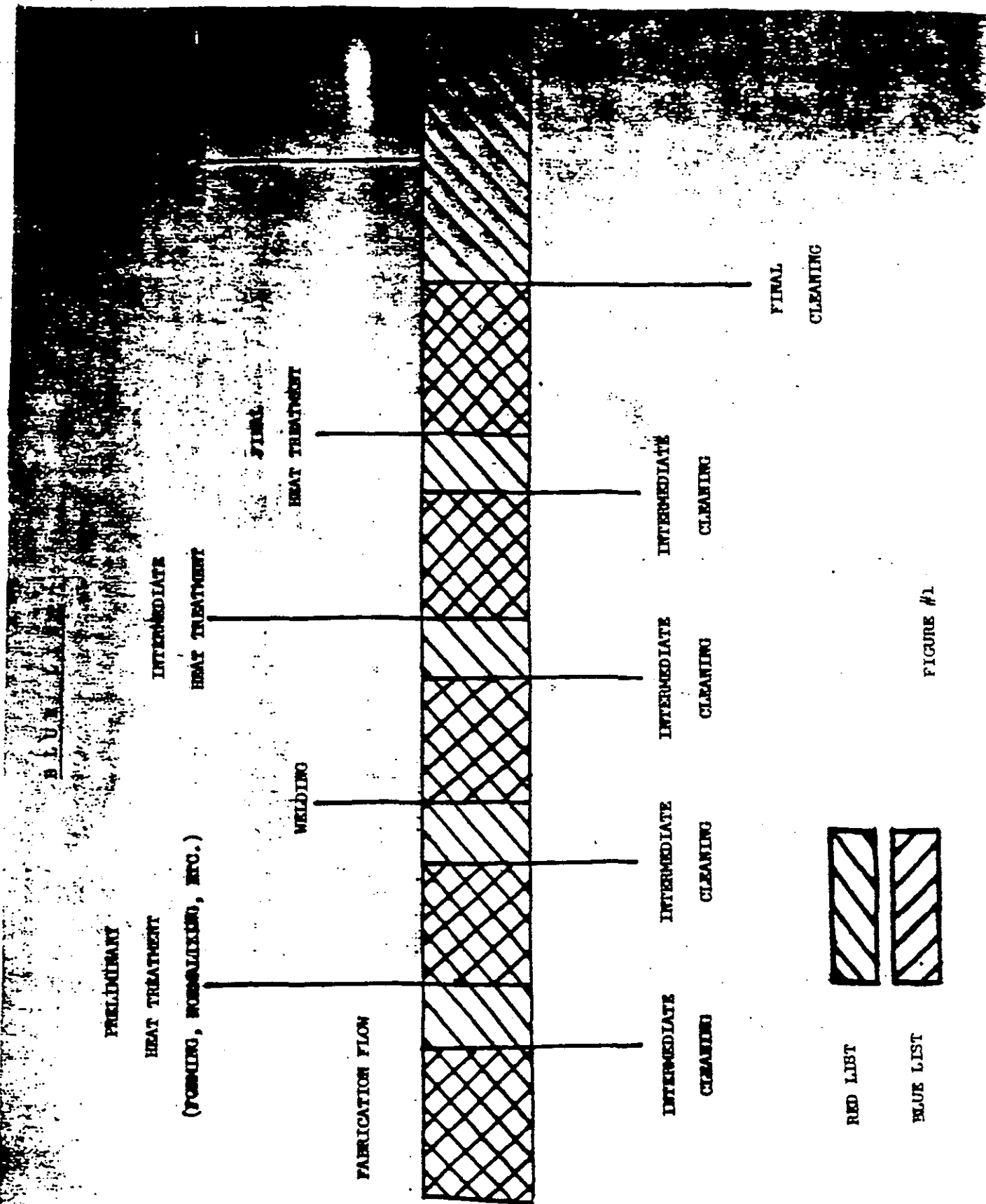
Category 2:

Consumable materials to be purchased to other special order requirements of Nuclear Equipment.

Category 3:

Materials requiring that they be purchased with the requirement that they contain no more than 10 ppm of Mercury.

Category 4:



BLADE LIST

B-1

Adhesive

Liquid	#104 Quick Set (Loctite Corp)	4		QA-TR-0131
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Alcohol

Methyl	Methyl Alcohol (Ashland Chemical)	2	O-M-232	330026
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Asbestos

Gasket Material	#900 Sheets (Garlock Co)	4		
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Bag

Burlap	Burlap Bag 6" x 9" (Ohio Valley Bag & Burlap)	4		890032
	Burlap Bag 6" x 12" (Ohio Valley Bag & Burlap)	4		890033
	Burlap Bag 12" x 20" (Ohio Valley Bag & Burlap)	4		890030
	Burlap Bag 20" x 30" (Ohio Valley Bag & Burlap)	4		890031

Cementing Material

Cementing Material	Bondrite (Stanley Corp)	4		
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Chalk

Blue	#777 Blue Carpenter (Dixon)	4		891005
White	White (Crayola)	4		
	#31-144 (Hygleia)	4		
Yellow	Yellow Dustless (Binney & Smith)	4		

Cloth

Burlap	Burlap (Ohio Valley Bag & Burlap)	4		QA-TR-0006
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Coolant

Cutting Oil	Cimplus X-210 (Cincinnati Milliron)	4		QA-TR-0007
	#2190 (White & Bagley)	4		QA-TR-0127
	Trinsol (Master Chemical Corp)	4		QA-TR-0021
	#2 Tunicut (Sun Oil Co)	4		QA-TR-0128

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Circool '00' Wafers (Cincinnati Millicron)

12

Sealing Putty Duxseal (John Manville)

11

800629

Layout
Blue Layout.

11

11

QA-TR-0009

Cup Grease #2 (Texaco)

ii

892990

#507 (Alloy Metal Abrasive)

2

891530

PlaudIt (Turco Prod)

↑↑

SKL-NF/SKL-S Spotchek Formula B (Magnaflux Corp)
SKC-NF Spotchek Formula B (Magnaflux Corp)
SKD-NF Spotchek Formula B (Magnaflux Corp)

2

2

2

MIL-I-25135

NIL-I-25135

MIL-I-25135

SKL-NT/SKL-S Spotchek Formula B (Magnaflux Corp)
SKC-S-Spotchek Formula B (Magnaflux Corp)
SKD-S-Spotchek Formula B (Magnaflux Corp)

2

2

2

MIL-I-25135

MIL-I-25135

MIL-I-25135

Dy-Chek Penetrant (Turco Prod)
Dy-chek Remover/Emulsifier (Turco Prod)

2

2

MIL-I-25135

MLL-I-25135

BLUE LIST

B-3

Liquid Penetrant Materials

Group II Materials (Cont)

Developer Cleaner	Iy-check Developer (Turco Prod) Iy-check Cleaner (Turco Prod)	2 2	MIL-I-25135 MIL-I-25135
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Group I Materials

Penetrant (CUO) Remover (CUO) Developer	Dubl-check #K-017 (Sherwin Inc) Dubl-check #K-019 (Sherwin Inc) SKD-NF Spotcheck Formula B (Magnaflux Corp)	4 4 2	MIL-I-25135
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Lubricant - General

Graphite Petrolum Jelly Vegetable Compound	Deltaforge #105 (Archson Colloids) Vaseline (Cheesebrough Foods Inc) Crisco (General Foods)	4 4 4	QA-TR-0013
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Lubricant - Tube Expanding

Tube Expanding	Sand Fluid Vastolein TP (G. Whitfield Richards Co)	4	QA-TR-0016
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Macroetchants

Copper Sulfate Ferric Chloride Nitrol	Copper Sulfate (Chemtron Corp) Ferric Chloride (Dow Chemical) Nitrol (Dow Chemical)	4 4 4
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Magnetic Particle Materials

Particles	#3-A Black Iron Particles (Magnaflux Corp) #1 Grey Iron Particles (Magnaflux Corp) #B-A Red Iron Particles (Magnaflux Corp)	4 4 4	QA-TR-0107 893520 QA-TR-0109
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Never-Seez

Thread Lubricant	Never-Seez (Never-Seez Corp)	4	893730
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