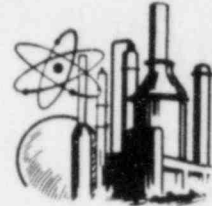


# GUYON ALLOYS, INC.

56-457



TUBULAR PRODUCTS FOR THE ENERGY INDUSTRIES

950 South Fourth Street, Harrison, N.J. 07029

(201) 485-5050

February 14, 1985

United States Nuclear Regulatory Commission  
Washington, D.C. 20555

Attn: Mr. Edward L. Jordan, Director  
Division of Emergency Preparedness  
and Engineering Response  
Office of Inspection and Enforcement

cc: Mr. Gary G. Zech, Chief/Mr. E.T. Baker  
Vendor Program Branch  
Division of Quality Assurance  
Safeguards, and Inspection Programs

Subject: Possible 10CFR Part 21 Notification  
3/4" NPS S/40 SA-312 TP304 Stainless Steel Pipe  
of Sandvik, Inc. manufacture furnished to  
Commonwealth Edison Co.-Braidwood Station

Attached please find copies of a letter dated January 24, 1985 received from the Commonwealth Edison Co. and a Guyon Alloys reply thereto which in combination describe inside surface imperfections or deviations found in the subject stainless steel pipe by Commonwealth Edison.

Based on your March 1984 request for copies of notifications made in conjunction with Bonney Forge Material Lacking Chemical Overcheck, and in view of the criticism or questions regarding our 10CFR Part 21 procedures contained in your November 14, 1984 letter/report of the NRC inspection of our Houston, Texas facility, it is requested that guidance be provided by your respective Divisions or Branches as to what 10CFR Part 21 notifications must be made by Guyon Alloys with regard to the circumstances outlined in the attached letters.

Please note that the referenced pipe was procured by Commonwealth Edison and in turn by Guyon Alloys prior to 10CFR Part 21 being published as an effective rule but shipment thereof was effected in December 1977.

We have reviewed our records and have identified 19 additional purchases of the same size, wall thickness, and grade of pipe from Sandvik, Inc. during the years 1976 thru 1978. In turn, the recipients of 70 shipments of this additional pipe which was procured for nuclear or possibly safety-related use. Whether or not the reported deficiencies are heat identity related, none of the additional pipe was of the same heat identities as furnished to the Commonwealth Edison Braidwood Station.

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**GUYON ALLOYS, INC.**

February 14, 1985

United States Nuclear Regulatory Commission  
Washington, D.C. 20555

Attn: Mr. Edward L. Jordan, Director  
Division of Emergency Preparedness  
and Engineering Response  
Office of Inspection and Enforcement

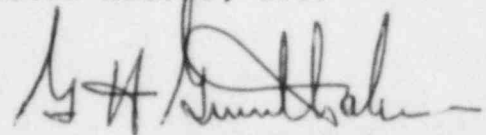
Page #2

If the reported deficiencies are determined to create a substantial safety hazard and not to be related to size, wall thickness, grade, and/or heat identity of pipe, an indeterminable amount of time would be required to identify recipients of hundreds if not thousands of shipments of all grades and sizes of pipe of Sandvik manufacture which has been furnished by Guyon Alloys for use at nuclear power plants.

An early response will be appreciated.

Very truly yours,

GUYON ALLOYS, INC.

A handwritten signature in dark ink, appearing to read "G H Grunthaler", with a long horizontal flourish extending to the right.

George H. Grunthaler  
Vice President  
Technical Services

GHG:ldb

Encl.



**Commonwealth Edison Co.**

Braidwood Station  
RR 1, Box 81  
Braceville, IL 60407  
Telephone 815/458-2801

January 24, 1985

Guyon Alloys, Incorporated  
440 E. Swedesford Road  
Wayne, PA 19087

Attention: Mr. Jack Gardner

Subject: Braidwood Station - Units 1 & 2  
Commonwealth Edison Company Purchase Order  
#207003, Dated 12/8/76  
3/4", Sch/40, SA 312 TP 304, ASME Sec. III Cls 1  
Pipe, Heat #783243

Dear Mr. Gardner,

Mandrel extrusion gouges affecting five linear inches of the above referenced pipe have been discovered. The abnormalities cover approximately one-fourth of the I.D. surface, and have resulted in a worst case minimum wall thickness of 0.086" - 0.027" below nominal wall thickness. This material was purchased under the ultrasonic testing exemption defined in the 1974 Edition, Summer 1975 Addenda of ASME Section III, Subsection NB, paragraph 2510. Use your discretion in determining the propriety of filing a 10CFR Part 21 notification.

Please direct your questions to me on (815) 458-2801 extension 2362.

Sincerely,

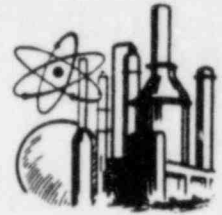
R. J. Kelm  
Mechanical Field Engineer  
Braidwood Station

RJK/ms

cc: T. Quaka, QA  
T. O'Connor, PGCo

85-31E

# GUYON ALLOYS, INC.



TUBULAR PRODUCTS FOR THE ENERGY INDUSTRIES

950 South Fourth Street, Harrison, N.J. 07029

(201) 485-5050

Commonwealth Edison Co.  
Braidwood Station  
RR1, Box 81  
Braceville, Illinois 60407

February 14, 1985

Attn: Mr. R.J. Kelm  
Mechanical Field Engineer  
Braidwood Station

Subject: Braidwood Station - Unit 1 & 2  
Commonwealth Edison Company Purchase Order  
#207003, Dated 12/8/76  
3/4", Sch/40, SA 312 TP 304, ASME Sec. III Cls 1  
Pipe, Heat #783243

Receipt of your letter dated January 24, 1985 bearing the above reference is herewith acknowledged.

A review of our records indicates that 11371'-2" of 3/4" S/40 smls. SA-312 Grade TP304 stainless steel pipe was furnished by Guyon Alloys for Item #15 of your order #207003 and that this pipe was shipped to your Braidwood Station on December 22, 1977 as part of a six truck load shipment. All of the 3/4" S/40 TP304 pipe was manufactured by Sandvik Inc. under their ASME Quality System Certificate N-1400 and consisted of 6220'-1" of heat #783243, 3569'-0" of heat #745207, and 1582'-1" of heat #M0021.

The following confirms our telephone discussion of February 5, 1985 with regard to your letter and our understanding of the information provided by you during the discussion.

Per your advice, based on visual examination of pipe nipples cut from 3/4" S/40 TP304 pipe of heat #783243, in or about June 1983 one 3" long pipe nipple was found to contain an inside surface imperfection as described in your letter. At that time approx. 2100 feet of the 3/4" S/40 TP304 pipe of heat #783243 (or all three heats?) was unused and in your site storage area. Resultant of subsequent visual examination of the bore and inside surface of all pipe lengths comprising the approx. 2100 feet of pipe, one additional inside surface imperfection was discovered near the center of one pipe length. Upon cutting the area containing the imperfection from the center of this length, it was determined that the imperfection was approx. 2" in length and extended approx. one fourth of the inside pipe circumference in width. Therefore the five linear inches of pipe described in your letter consists of the 2" long piece of pipe and the 3" long pipe nipple.

cc: Mr. Bert Herbert, Mgr. Q.A.  
Sandvik, Inc., Scranton, Pa.

# GUYON ALLOYS, INC.

Commonwealth Edison Co.  
Braidwood Station  
RR1, Box 81  
Braceville, Illinois 60407

February 14, 1985

Attn: Mr. R.J. Kelm

Page #2

The worst case minimum wall thickness of 0.086" - 0.027" below nominal wall thickness (which is 0.013" below the 0.099" minimum wall thickness permitted by the SA-312/SA-530 material specification) cited in your letter you advised was determined by micrometer measurement of wall thickness at point of greatest depth of imperfection after the 3" long nipple and 2" long piece of pipe had been longitudinally cut in halves.

The "mandrel extrusion gouges" description of imperfections contained in your letter is based on terminology provided by the Sandvik, Inc. Manager of Quality Assurance, Mr Bert Herbert, during a telephone discussion or discussions held by you directly with Sandvik sometime after the discovery of the imperfections and prior to the date of your letter or advice to Guyon Alloys. During your discussion(s) with Sandvik it was indicated that Sandvik had had at least one previous experience with the mandrel extrusion gouges problem.

You were advised during our telephone discussion that the 3/4" S/40 pipe furnished by Guyon Alloys was manufactured by the cold drawn process at Sandvik's Scranton, Penna. manufacturing plant. Therefore, if mandrel extrusion gouges were the cause of the inside surface imperfections, such gouges would have originated in the extruded tube (pipe) rounds from which the final size pipe was cold drawn. Being mechanical in nature, mandrel extrusion gouges would not necessarily relate to a specific heat identity, grade, or size and wall thickness of pipe.

You advised that although all of the 3/4" S/40 TP304 pipe had been procured for ASME Section III Class 1 use based on the exemption from non-destructive examination per Paragraph NB-2510/NB-3673, none of the 3/4" S/40 TP304 pipe has been installed in Class 1 piping systems. Based on stress calculations performed, the majority of approx. 1100 feet of the 3/4" S/40 pipe (of heat #783243 or all three heats?) installed in ASME Section III Class 2 or Class 3 systems has been determined to be satisfactory for intended services. For three limited scope Class 2 or 3 systems, provisions are being made to eddy current examine installed 3/4" S/40 TP304 pipe to assure its freedom from imperfections of the type under discussion. Whether any of the balance of the pipe furnished has been used or installed in systems which may be considered safety related was not discussed.



**GUYON\*ALLOYS, INC.**

Commonwealth Edison Co.  
Braidwood Station  
RR1, Box 81  
Braceville, Illinois 60407

February 14, 1985

Attn: Mr. R.J. Kelm

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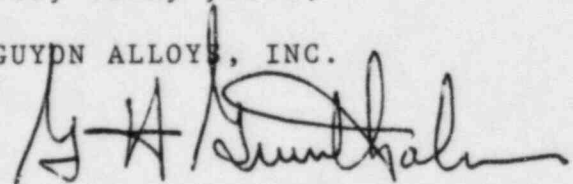
Formal notification of the discussed imperfections having been found is being provided to Sandvik, Inc. with copies of your letter and this reply thereto. Sandvik is being requested to evaluate the information provided thereby and to furnish a written statement of cause and steps taken or to be taken to correct the problem and preclude recurrence.

With regard to your letter advice to use our discretion in determining the propriety of filing a 10CFR Part 21 notification, in as much as Guyon Alloys and in most cases a material manufacturer does not have the capability of evaluating whether a deviation and specifically the discussed imperfections may create a substantial safety hazard, under the provisions of 10CFR21 it is Guyon Alloys practice to notify and provide all available information to the purchaser to facilitate an evaluation by the purchaser, the licensee, or the licensee's designee.

In this case however, we are sending copies of your letter and this reply to the Division of Emergency Preparedness and Engineering Response -Office of Inspection and Enforcement and to the Vendor Program Branch Division of Quality Assurance, Safeguards, and Inspection Programs at the Washington, D.C. offices of the Nuclear Regulatory Commission with a request for their advice and guidance as to whether 10CFR Part 21 notifications are required and, if so, the extent thereof.

Very truly yours,

GUYON ALLOYS, INC.

A handwritten signature in dark ink, appearing to read 'G H Grunthaler', is written over the typed name.

George H. Grunthaler  
Vice President  
Technical Services

GHG:ldb