VOID SHEET

03021228

TO: License Fee Management Branch

FROM: Region I

SUBJECT: VOIDED APPLICATION

Control Number: 123312

Applicant: Berthold Systems, Inc.

Date Voided: 6/19/96

Reason for Void: Duplicate of previous action for license 37-21226-02G (030-21228). ~~Before~~ After review.

M. A. Perkins 6/19/96
Signature Date

Attachment:
Official Record Copy of
Voided Action

FOR LFMB USE ONLY

Final Review of VOID Completed:

Refund Authorized and processed

No Refund Due

Fee Exempt or Fee Not Required

Comments: Duplicate Request

Log completed

Processed by: CP

OFFICIAL RECORD COPY

ML 10

BERTHOLD SYSTEMS, INC.
Process Control Instruments
Hopewell Business & Industrial Park
101 Corporation Drive
Aliquippa, Pennsylvania 15001-4863
Telephone: (412) 378-1900
Telefax: (412) 378-1926

030-21228

June 4, 1996

Ms. Kathleen Dolce
US nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, Pa 19406-1415

Dear Ms. Dolce:

This letter is a request for an amendment to Berthold Systems, Inc. License # 37-21226-01 and License #37-21226-02G.

The following items must be added to the license:

1. Item #11 of license # 37-21226-01 shouid read:

   The Radiation Safety Officer for this license is Mary T. Dedola.

Attachment #1 is a copy of Mary's Resume showing her experience for this position.
Attachment #2 is a copy of the Certificate showing Mary's completion of the 40 hour Radiation Safety Officer Course.

2. Item #12 of the Berthold license #37-21226-01 and Item #11 of the Berthold License # 37-21226-02G should read:

	Device Model No.	Isotope	Source Dwg No.	Max Activity	Lic
1.	LB 7400 D or F	Cs-137	Cs7.P02/-A	300 mCi	Both
2.	LB 7442 D or F	Cs-137	Cs7.P04/-A	3000 mCi	Both
3.	LB 7445 D or F	Cs-137	Cs7.P02/-A	500 mCi	Both
4.	LB 7446 D or F	Cs-137	Cs7.P04/-A	3000 mCi	Both

Attachment #3 is a copy of this information as shown on APGEE's Registrations amendment.

If there are any questions concerning this application please contact Mary Dedola at the above number.

Sincerely,

Charles Ferrin
Vice President
Berthold Systems, Inc.

Mary T. Dedola

Education:

Bachelor of Science Degree in Electrical Engineering from the University of Pittsburgh

Work Experience:

1981-1991	Homemaker
1991-Present	Berthold Systems, Inc. - Assistant Radiation Safety Officer/ Engineering Services Manager - Compliance Engineer/Service Administrator

Duties:

- Application for Amendments and Additions to Materials Licenses
- Applications for amendments and Additions to AGEE Registrations and License
- Radioactive Materials Inventory (RAM) Control, including:
  - Weekly updating of RAM (Computerized RAM Inventory)
  - 6 month physical inventory
  - Verification that BSI licenses conform to shipment requirements.
  - Sending, receiving and reviewing Customer License Packages for release of shipment of Radioactive Material
  - Preparing monthly and quarterly NRC reports
    - Assistant Radiation Safety Officer at BSI
- Handle all customer and In-House licensing questions
- Prepare customer applications for Registrations and Licenses through the Agreement States and the NRC

Experience:

- Belt Weigher system (LB 330)
  - Performed site surveys and calibration the three LB 330 Systems.
  - Sources: CO-60 - 5 and 6 mCi
- Ash Analyzer (LB AS)
  - Performed re-calibration of one LB AS System
- Insertions Rod Level (LB 300 IRL)
  - Attended Customer Training Class given by BSI in the use of the LB 300 IRL mold level system
- Continuous Level System (LB 300 L)
  - Removed and placed in storage an LB 300 L
- Observed the insertion of a CS-137, 5 mCi point source into a LB 7440 shield

Additional Education:

Completion of the Radiation Safety Officer Training Program at Applied Health Physics in Bethel Park, PA.

Certificate Of Radiological Training

This is to certify that MARY DEPOLA

completed the 40 hour course of training entitled

Radiation Safety Orientation For RSO

presented at Applied Health Physics, Inc., Bethel Park, PA 15102

on August 21, 1992

Applied HEALTH PHYSICS Inc.

Bethel Park, Pennsylvania

Robert G. Gallagher
President

ATTACHMENT #2

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF DEVICE
(AMENDED IN ITS ENTIRETY)

NO.: NR-0112-D-102-B DATE: April 26, 1996

DEVICE TYPE: Gamma Gauge for Density and Fill Level Measurement

DESCRIPTION:

Model LB 7400 Series density and fill level measuring devices will use either a single cobalt-60 sealed source or cesium-137 sealed source. Models LB 7440 and LB 7445 and models LB 7442 and LB 7446 are essentially similar in design, construction and use. The model LB 7444 is also similar in design and use to the other models in the series. The designation "D" in the model number designates devices used for density measurement and the designation "F" (formerly "L") designates devices used for fill level measurement. According to the distributor, fill level devices have been distributed in the past with either an "F" designation or an "L" designation. The distributor has committed that as of the effective date of this document, all newly distributed fill level devices will be designated with "F."

The source housings differ in physical dimensions: ranging in external dimensions from 7.09" (18 cm) in height and width by 8.46" (21.5 cm) in length for the LB 7440 D&F and LB 7445 D&F, 9.45" (24 cm) in height and width by 11.18" (28.4 cm) in length for the LB 7442 D&F and LB 7446 D&F, and 12.7" (32.2 cm) in height and width by and 14.8" (37.5 cm) in length for the LB 7444 D&F. The housings range in weight from 68.3 - 374.8 lbs (31 kg - 170 kg). The selection of a housing for a particular facility depends on the source radioisotope and activity required for a particular application. The devices have been evaluated for the following isotopes, activities and source capsules:

Device	Maximum Activity	Isotope	Source Capsule
LB 7440 D&F	10 mCi (0.37 GBq)	Co-60	P-2602-100
	500 mCi (18.5 GBq)	Cs-137	P-2623-100
	300 mCi (11.1 GBq)	Cs-137	CDC.700
	500 mCi (18.5 GBq)	**Cs-137**	**Cs7.P02/-A**
LB 7442 D&F	100 mCi (3.7 GBq)	Co-60	P-2602-100
	3,000 mCi (111 GBq)	Cs-137	2645.100-000
	3,000 mCi (111 GBq)	Cs-137	CDC.93
	3,000 mCi (111 Gbq)	**Cs-137**	**Cs7.P04/-A**
LB 7444 D&F	500 mCi (18.5 GBq)	Co-60	P-2602-100
LB 7445 D&F	10 mCi (0.37 GBq)	Co-60	P-2602-100
	500 mCi (18.5 GBq)	Cs-137	P-2623-100
	300 mCi (11.1 GBq)	Cs-137	CDC.700
	500 mCi (18.5 GBq)	**Cs-137**	**CS7.P02/-A**

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF DEVICE
(AMENDED IN ITS ENTIRETY)

NO.: NR-0112-D-102-B DATE: April 26, 1996

DEVICE TYPE: Gamma Gauge for Density and Fill Level Measurement

DESCRIPTION: (Cont'd)

LB 7446 D&F	100 mCi	(3.7 GBq)	Co-60	P-2602-100
	3,000 mCi	(111 GBq)	Cs-137	264[illegible] 100-000
	3,000 mCi	(111 GBq)	Cs-137	CDC.93
	3,000 mCi	**(111 GBq)**	**Cs-137**	**Cs7.P04/-A**

The manufacturer/distributor has committed that a maximum of 30 mCi (1.11 GBq) Cs-137 will be used in all conveyor belt density measurement applications.

The source housings have a heavy cast iron outer shell. This shell is lead filled in such a way as to provide shielding of the radiation source in all directions when the shutter is closed. Within the heavy cast iron outer shell is a rotating lead shutter. The shutter is contained within a cylindrical stainless steel enclosure which is further enclosed within an additional cylindrical stainless steel enclosure that separates the shutter mechanism from the lead shielding. A tapered cylindrical hole is bored through the shutter's lead shielding. When the shutter is "open", the cylindrical hole is in line with the fixed position of the source capsule and a window in the front steel plate. The steel plate is sealed to the cast iron outer shell by bolts for the LB 7440, LB 7442 and LB 7444, and threaded in place for the LB 7445 and LB 7446. This plate provides protection to the source and shutter mechanism against dust and other air contaminants.

Density measuring devices are intended for use in various configurations including mounted on pipes and on conveyor belts. A collimator may be installed in the device shutter to further define tne beam in density applications. Attachment (1(a)) shows a typical density installation on a pipe. When the shutter is in the "open" position, the primary beam from the source housing traverses the pipe and contents and strikes the NaI(Tl) detector crystal of the scintillation counter. In this configuration, a lead collar is mounted in the vicinity of the detector to reduce radiation levels. Attachment (2) shows a typical density installation on a conveyor belt as the MicroMoist System. This system is used in conjunction with microwave instruments to measure moisture in process materials. Conveyor belt systems will contain a barrier which restricts inadvertent placement of body parts into the primary beam.

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

(FOR LFMS USE)
INFORMATION FROM LTS

PROGRAM CODE: 03240
STATUS CODE: 0
FEE CATEGORY: 3J
EXP. DATE: 20010731
FEE COMMENTS: ____________________
DECOM FIN ASSUR REQD: N

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED
   APPLICANT/LICENSEE: BERTHOLD SYSTEMS, INC.
   RECEIVED DATE: 960610
   DOCKET NO: 3021228
   CONTROL NO.: ~~123312~~ VOID 6/19/96.
   LICENSE NO.: 37-21226-02G
   ACTION TYPE: AMENDMENT

2. FEE ATTACHED
   AMOUNT: ---/-----
   CHECK NO.: ---/-----

3. COMMENTS
   Reference 123311

SIGNED Rebecca J. Brown
DATE 6/13/96

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED /✓/)

1. FEE CATEGORY AND AMOUNT: 3J $280

2. CORRECT FEE PAID. ✓ APPLICATION MAY BE PROCESSED FOR:
   AMENDMENT ____________
   RENEWAL ____________
   LICENSE ____________

3. OTHER ______________________________

SIGNED RBrown
DATE 6/18/96

1996 JUN 17 PM 2:05

Log June 13 ✓ ED
Remitter
Check No. 1426
Amount ($850) $280 (Already 123311)
Fee Category 3J
Type of Fee AMD
Date Check Rec'd 6/18/96
Date Completed
By RBrown

03+07 fw 6/18/96