



March 13, 2013
GDP 13-0007

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Paducah Gaseous Diffusion Plant (PGDP)
Docket No. 70-7001, Certificate No. GDP-1
Response to Apparent Violations in Inspection Report No. 70-7001/2012-005; EA-12-235

A Nuclear Regulatory Commission (NRC) letter dated February 11, 2013, transmitted NRC Inspection Report Number 70-7001/2012-005 which discussed six apparent violations being considered for escalated enforcement. The apparent violations involved alleged failures to properly manage Process Gas Leak Detector (PGLD) devices, including the failure to maintain control of the devices, perform leak testing, perform inventories, perform surveys, maintain the required radioactive material labeling, and improper waste shipments. The United States Enrichment Corporation's (USEC) Response to the subject apparent violations is provided in Enclosure 1. USEC is denying all of the apparent violations. Certain relevant supporting documents are provided in Enclosure 2. There are no new commitments in this Response.

Sincerely,

Steven R. Penrod
Vice President Enrichment Operations
United States Enrichment Corporation

DCS:mcl

Enclosures: As Stated

cc: NRC Regional Administrator, Region II
NRC Senior Resident Inspector, PGDP

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**UNITED STATES ENRICHMENT CORPORATION
RESPONSE TO APPARENT VIOLATIONS IN
INSPECTION REPORT NO. 70-7001/2012-005; EA-12-235**

Provided below is the United States Enrichment Corporation's (USEC) Response to the six Apparent Violations (AVs) contained in the above-referenced Inspection Report (IR).

Background

Before addressing each of the six AVs, USEC would like to provide the following brief background. The AVs all involve matters associated with Process Gas Leak Detectors (PGLDs) at the Paducah Gaseous Diffusion Plant (Paducah). The Inspection Report refers to approximately 4,800 of certain of these devices at the Paducah plant, and five separate models: three low voltage models; and two high voltage models. See IR Report Details at pages 8 and 12, respectively. The low voltage models contain 0.8 microcuries of Americium-241 (Am-241) and are common home use-type smoke detectors, which can be purchased by any person at wholesale and retail outlets throughout the United States. These devices are not subject to NRC licensing requirements, and it is USEC's understanding that they are not the subject of any of the six AVs.

The two high voltage models in USEC's possession at Paducah are Pyrotronics, Inc. models F5B and F3/5A, each with an activity of 80 microcuries of Am-241. It is USEC's understanding that these are the devices that are the subject of the AVs cited in the IR.

The IR contains a lengthy history of issues being raised about USEC's use and disposition of PGLDs. USEC has generally chosen not to discuss the details of that history in this Response, and instead to focus on what it now believes are the fundamental and dispositive legal principles that govern the resolution of the six AVs. The most fundamental of those principles is that USEC's possession, use and transfer of the PGLDs is exempt from NRC regulation. On the basis of those principles, USEC is hereby, respectfully, denying all six AVs.

In addition, each of the AVs states that it is or could be determined to be safety significant. Because USEC is denying each of the AVs, it is not responding to this aspect of the AVs in detail (except for AV2 regarding transportation). However, as we discuss, the NRC has made generic determinations that the PGLDs in question are exempt from licensing and regulation after initial distribution.

Furthermore, the NRC "systematically" revisited and reanalyzed the safety of its byproduct (and source) material exemptions in 2001 in NUREG-1717, "Systematic Radiological Assessment of Exemptions for Source and Byproduct Materials," including the 10 CFR § 30.20 exemption. In doing so, the NRC stated, among other things, that it intended to "provide an assessment upon which the NRC can review and examine the radiological impact of current exemptions and determine if regulatory actions may be

needed for ensuring public health and safety.” NUREG-1717, Executive Summary at page xxi. The NRC used dose calculation methodology of the International Commission on Radiological Protection, examined normal life cycle as well as accident and misuse scenarios (id.), and noted that between 1971 and 1986, “92 million [ionization chamber smoke detectors] containing a total of 320 Ci of ²⁴¹Am were sold in the United States.” NUREG-1717 at page 2-217. No change in regulatory requirements was recommended and the relevant exemption remains in place today.

Restatement of Apparent Violation 1

1. "Loss of Control of Radioactive Material (AV 70-7001/2012-005-01)"

The inspectors identified an AV of 10 CFR 20.1802 for the failure to control or maintain constant surveillance of the licensed material in the PGLD devices. As a result of the failure to maintain control or constant surveillance of the devices, on August 22, 2011, the certificate holder lost control of twelve PGLD devices each containing 80 uCi of Am-241 (960 uCi total). The certificate holder unknowingly shipped the devices in commerce to their waste processor who identified the radioactive material.

The inspectors concluded that the certificate holder's failure to control or maintain constant surveillance of licensed material contained in the PGLD devices that unknowingly left the plant site in a waste shipment to be an AV. The AV could be determined to be of regulatory and safety significance because the aggregate quantity of the Am-241 was greater than 1000 times the quantity specified in Appendix C of 10 CFR 20 (see NRC Enforcement Policy Section 6.7.c.10.(a) for additional information). Also, the deficiency can be determined to be safety significant because if the failure to control the PGLD devices throughout the site is left uncorrected, a more significant safety concern could exist, and have the potential to allow the continued inadvertent and unknowing disposal of the Am-241 sealed sources."

USEC Response

USEC denies this AV on the following basis: The AV cites USEC for failure to comply with 10 CFR § 20.1802 "Control of material not in storage." 10 CFR § 20.1001(a) states, in part, that Part 20 establishes "standards for protection against ionizing radiation resulting from *activities conducted under licenses* issued by the Nuclear Regulatory Commission." Emphasis added. 10 CFR § 20.1001(b) states, in part, that "[i]t is the purpose of the regulations in this part to control the receipt, possession, use, transfer, and disposal of *licensed material*...." Emphasis added. In addition, 10 CFR § 20.1802 (the regulation specifically cited in the AV) states that a licensee shall control and maintain constant surveillance of "licensed material" that is in a controlled or unrestricted area and that is not in storage.

While 10 CFR § 20.1003 defines a "License" as "a license issued under the regulations in parts 30 through 36, 39, 40, 50, 60, 61, 63, 70, or 72 of this chapter," section 20.1002 also applies Part 20 "in accordance with 10 CFR 76.60 to persons required to obtain a certificate of compliance...under part 76 of this chapter." Under this regulation, USEC is, of course, subject to Part 20, in the same manner as an NRC "licensee." The Paducah certificate of compliance is the equivalent of a license for this purpose. However, under section 20.1001(a), Part 20 does not apply to "activities [not] conducted under a license" or certificate. Under section 20.1001(b), Part 20 does not apply to the receipt, possession, use, transfer or disposal of non-"licensed material." And under the specific

regulation against which the AV was cited (section 20.1802), the control and surveillance requirements only apply to "licensed material."

As discussed below, the 12 PGLDs (which were all either F5B or F3/5A high voltage 80 microcurie models) were not, and did not contain, "licensed material" authorized under a general or specific license, and their shipment to the waste processor was not an "activity conducted under licenses" as contemplated by section 20.1001(a). Instead, USEC's possession and use of the PGLDs were exempt from NRC regulation and licensing requirements.

In a Federal Register notice entitled "Notice of Exemption of Fire Detection Units" dated November 26, 1969 (34 Fed. Reg. 18,870), the U.S. Atomic Energy Commission (AEC) stated that:

Models F5A, F3.5 (formerly F3.5A), and F6 fire detection devices containing americium 241, distributed by Pyrotronics, Inc., prior to the issuance of AEC License No. 29-08864-04E on August 28, 1969 which authorized the distribution of these devices to persons exempt from AEC licensing requirements have been found to meet the safety criteria...for gas and aerosol detectors containing byproduct materials for use under the class exemption in § 30.20.... These devices were previously distributed under AEC License No. GL-133 prior to the promulgation of § 30.20. However, for the purposes of the *exemption* in § 30.20, such license [*i.e.*, the *distributor's* General License GL-133] shall be deemed to have been issued under § 32.26.... [P]ersons [who] receive, possess, use, transfer, export, own or acquire [such] devices...are hereby deemed *exempt* from the requirements for [an AEC] license....
Emphasis added.

A copy of this Notice is provided in Enclosure 2.

The 12 devices in question were either Pyrotronics' models F5B or F3/5A. (See "Background" section above). The above-quoted Notice of Exemption explicitly exempted from AEC (and thereby NRC) regulation the Paducah F3/5A devices distributed prior to August 28, 1969.¹ The Notice did not mention the model F5B devices possessed by USEC.

However, in a separate "Notice of Exemption of Fire Detection Units; Correction" dated April 11, 1970 (35 Fed. Reg. 6018), the AEC stated that the prior Exemption Notice was

¹ The Notice referred to model F3.5A but was intended to refer to model F3/5A. See below.

"incorrect in that it omitted Model F5B and referred to Model F3.5 (formerly F3.5A) instead of Model F3/5." This corrected Exemption Notice explicitly included within the exemption, both models F5B and F3/5A (the models in USEC's possession) as well as other models distributed prior to the August 28, 1969, issuance of specific license 29-08864-04E to Pyrotronics. A copy of this corrected notice is provided in Enclosure 2.

In short, any of the 12 PGLDs that may have been distributed by Pyrotronics prior to August 28, 1969, are exempt devices; their receipt, possession, use and transfer by USEC is not subject to a general or a specific license; and they do not constitute "licensed material", nor are they subject to Part 20.

Apart from the 1969 and 1970 Exemption Notices discussed above, these devices are also exempt from licensing under current NRC regulations. In particular, 10 CFR § 30.20 "Gas and aerosol detectors containing byproduct material" states, in relevant part,

(a) Except for persons who manufacture, process, produce, or initially transfer for sale or distribution gas and aerosol detectors containing byproduct material, *any person is exempt* from the requirements for a license...to the extent that such person receives, possesses, uses, transfers, owns, or acquires byproduct material in gas or aerosol detectors designed to protect life or property, [from fires and airborne hazards], and manufactured, processed, produced, or initially transferred in accordance with a specific license issued under § 32.26. Emphasis added.

The PGLDs that are the subject of this AV are "gas and aerosol detectors" in fact (and were explicitly recognized as such by the AEC in the 1969 Notice of Exemption as well). Furthermore, they were designed to protect life or property from fires or airborne hazards (*i.e.*, UF6 hazards). In addition, their distribution under GL-133 was "deemed" by the AEC "to have been issued under § 32.26...."

With respect to any of the 12 PGLDs that may have been distributed *after* August 28, 1969, AEC specific license 29-08864-04E explicitly and directly authorized Pyrotronics, pursuant to the specific licensing requirements of 10 CFR § 32.26, to distribute such devices "to persons exempt from the requirements for a license." This specific license included models F5B and F3/5A. See AEC License No. 29-08864-04E at 1, provided in Enclosure 2.

In short, the 12 PGLDs containing Am-241 are not licensed material; USEC's possession and use is exempt from the NRC licensing requirements; and as such is not subject to Part

20 in general or 10 CFR § 20.1802 in particular. For the reasons set forth above, USEC denies this AV.²

I. Reason for the Violation

USEC has denied the AV.

II. Corrective Actions Taken

None.

III. Corrective Actions to Be Taken

None.

IV. Date of Full Compliance

USEC is currently in full compliance.

² We note that the NRC Inspection Report states that some of the devices "have labeling to indicate their restricted use under a general license or under an NRC specific license. Many of the PGLD devices have the following warnings and prohibitions on the label:

Generally Licensed by Section 30.21(c) 10 CFR 30
Manufactured and Distributed by Pyrotronics, Inc. Pursuant to
AEC License GL133. Do not transfer, abandon or dispose of
this device except by return to Pyrotronics, Inc. or transfer to
other specifically licensed persons...."

The purpose of this reference in the Inspection Report is not clear. However, it does not affect the result reached above because: (1) Pyrotronics, not USEC, was the general licensee; and (2) USEC is "exempt" as previously described.

Restatement of Apparent Violation 2

2. "Improper Waste Shipment of Radioactive Material (AV 70-7001/2012-005-02)

The inspectors identified an AV of Title 10 Part 71, 49 CFR 171, Subpart A (Section 171.2(e)); and 49 CFR 172, Subpart C (Sections 172.202(a) and 171.202(b), and 172.203(d)), Subpart D (Section 172.302(a)), and Subpart E (Section 172.403) for the improper shipment of the PGLD devices to a waste processing facility. On August 22, 2011, the certificate holder improperly shipped radioactive material in 12 PGLD devices each containing 80 uCi of Am-241 (960 uCi total) as an exempted package in commerce. Specifically, the package was not properly classed as regulated radioactive material, was not described in the shipping papers to denote the material and activity, and was not properly marked and labeled.

The inspectors determined the certificate holder's failure to account for the Am-241 radioactive material in the shipment to be safety significant because shipments of improperly classed material, improper shipping papers, improperly marked and labeled containers could preclude emergency responders to take adequate actions in case of emergency. The radioactive material was offered for transportation in commerce that was not properly classed, described, marked, and labeled as required or authorized by applicable requirements or an exemption from 49 CFR Parts 172-174. (see NRC Enforcement Policy Section 6.8.d.4 for additional information)."

USEC Response

USEC denies this AV on the following basis: The AV cites USEC for failure to comply with 10 CFR Part 71 generally, without specifying a particular regulation within Part 71. However, the AV presumably is for failure to comply with 10 CFR § 71.5(a), which requires each licensee who publicly transports licensed material to "comply with the applicable requirements of [various] DOT regulations" in 49 CFR. Indeed, the AV cites the specific DOT regulations of concern to the NRC. The AV is based upon the alleged "improper shipment" of the same 12 PGLDs discussed in AV 1 above to a waste processing facility on August 22, 2011.

The NRC may not cite a licensee or certificate holder for failure to meet a DOT regulation unless the DOT regulation has been incorporated by reference into the NRC requirements, as 10 CFR § 71.5(a) does. Thus, the AV must be based on a noncompliance with NRC, not purely DOT, requirements. As discussed below, the event in question did not violate the referenced NRC requirements.

First, under 10 CFR § 71.0(c), the regulations in Part 71 as a whole, only apply to:

any licensee *authorized by specific or general license...to receive, possess, use, or transfer licensed material* [under certain circumstances]. Emphasis added.

Under this provision, if a licensee is authorized to receive, possess, use or transfer radioactive material without obtaining a general or specific license, then any such activities are not subject to 10 CFR Part 71 at all. As discussed further below, the 12 PGLDs in question are not "licensed material" authorized under a general or specific license, and USEC's possession, use and transfer is "exempt" from NRC regulation and Part 71 in particular.

Furthermore, 10 CFR § 71.14 "Exemption for low-level materials" states, in relevant part:

(b) A licensee is exempt from all requirements of this part, *other than §§ 71.5 and 71.88,*³ with respect to shipment or carriage of the following packages, provided the packages do not contain any fissile material, or the material is exempt from classification as fissile material under § 71.15:

(1) A package that contains no more than a Type A quantity of radioactive material.... Emphasis added.

Based on 10 CFR § 71.0(c) discussed above, this provision is not applicable here. However, if it was, the packages referenced in the AV did not contain any fissile material (only Am-241), and did not contain more than a Type A quantity of radioactive material. Thus, this shipment was exempt from Part 71 under 10 CFR § 70.14 as well, with the possible exception of 10 CFR § 71.5 (assuming for the sake of argument that Part 71 applies at all).

As for 10 CFR § 71.5, that regulation applies to each licensee (or certificate holder) "who transports *licensed material*" under certain circumstances, and it incorporates by reference the various DOT regulations with respect to such a shipment. Emphasis added. In this case, however, the 12 PGLDs did not constitute "licensed material," and thus 10 CFR § 71.5 does not apply.

³ Section 71.88, relating to air transport of plutonium, is not relevant here.

10 CFR § 71.4 "Definitions" defines "Licensed material" as:

byproduct, source, or special nuclear material received, possessed, used, or transferred under a general or specific license issued by the Commission pursuant to the regulations in this chapter.

As mentioned before, the 12 PGLDs were not received, possessed, used, or transferred under either a general or specific NRC license. Instead, their possession, use and transfer is "exempt" from NRC regulation.

The PGLDs were distributed by Pyrotronics, Inc. either: (1) prior to August 28, 1969 (in which case they were covered by the corrected Exemption Notice discussed earlier); or (2) after August 28, 1969 (in which case they were exempt under the specific Pyrotronics license issued on that date).

In short, the 12 PGLDs containing Am-241 are not licensed material; are exempt from the NRC licensing requirements as discussed above; and as such USEC is not subject to Part 71 or to NRC enforcement action for alleged violations of DOT requirements incorporated into the NRC regulations by reference. For the reasons set forth above, USEC denies this AV.

As mentioned in the "Background" section above, despite USEC's denial of this AV, it believes it is important, in this particular instance, to more specifically address the NRC's statement that the AV was "safety significant because [the manner of shipment] could preclude emergency responders to take adequate actions in case of emergency."

The shipment was properly and prominently placarded in compliance with U. S. DOT requirements with Class 7 Radioactive Materials placards displayed on the front, back and both sides of the trailer. Emergency responders would have seen the placards and recognized that precautions due to the presence of radioactive material should be taken, in the event a transportation event occurred. The shipment arrived at its destination without incident.

If the vehicle had been involved in an over-the-road emergency incident, upon seeing a Radioactive Materials Class 7 placard, first responders would have referred to the "U. S. DOT 2012 Emergency Response Guidebook (ERG)" which is the standard hazardous materials guide for U. S. on-scene responders. The ERG provides response protocols and initial isolation zone (IIZ) guidance for radiological and non-radiological hazardous materials.

In most municipal, county, parish and state jurisdictions, upon recognizing the involvement of radioactive materials in an incident, first responders *i.e.* fire departments or law enforcement agencies will contact a local or regional hazardous materials team,

the state radiation emergency team and/or the U. S. DOE Radiological Assistance Program for advanced support activities. Usually, local first responders will handle a radioactive material emergency incident by establishing an IIZ around the vehicle, evacuating people residing in the IIZ, and then waiting for further guidance from subject matter experts on the aforementioned special radiological response teams. This approach prevents the exposure and involvement of on-scene emergency responders to any hazardous or unsafe scenarios.

Furthermore, Am-241 encased within a PGLD does not pose a significant hazard to emergency response personnel. The 12 PGLD devices contained a total of 960 microcuries. Commercial ground shipping companies regulated by DOT under 49 CFR § 173.424 permit shipment of much greater amounts as "excepted packages/limited quantities" of radioactive materials. For example, the United Parcel Service (UPS) allows a maximum activity per package of 27,000 microcuries, with a maximum activity per smoke alarm of 270 microcuries. The shipment must be marked as "UN2911." Clearly, the USEC shipment of 12 PGLD devices of 80 microcuries each, with a total of 960 microcuries of activity (less than 1 millicurie) did not pose any potential significant safety hazard to emergency responders.

Finally, in NUREG-1717 section 2.15.4.4 titled "Present Exemption Analysis for Smoke Detectors: Accidents and Misuse," the NRC considered a transportation fire scenario involving a typical shipment of 7,200 smoke detectors containing a total of 7,200 microcuries. A release factor of 0.01% was assumed for the Am-241 source foils based on NUREG/CR-0403 and NUREG/CP-0001. The NRC concluded that an on-scene firefighter wearing a respirator while combating this fire scenario would receive an effective dose equivalent (EDE) of 0.003mSv (or 0.3 millirems). Therefore, a postulated USEC shipping incident involving 960 microcuries of Am-241 would not pose any unreasonable hazard or any safety significant situation to an emergency responder.

In summary, an emergency involving the August 22, 2011, USEC shipment would not have posed any undue, unusual or significant safety hazard to emergency responders in the various jurisdictions of transit. Responders would have used normal U. S. DOT ERG protocols with the support of local, state and federal radiological hazmat teams to bring a safe and environmentally sound resolution to the postulated incident.

I. Reason for the Violation

USEC has denied the AV.

II. Corrective Actions Taken

None.

IV. Corrective Actions to Be Taken

None

IV. Date of Full Compliance

USEC is currently in full compliance.

Restatement of Apparent Violation 3

3. "Failure to Perform Leak Testing of the PGLD Devices (AV 70-7001/2012-005-03)"

The inspectors identified an AV of 10 CFR 20.1101 and Section 5.3, "Radiation Protection," of the SAR for the failure to perform leakage testing on alpha emitting sources (e.g., Am-241) of activity greater than 10 uCi. Specifically, the certificate holder failed to test for leakage approximately 3,500 devices in use. The certificate holder reported no record of ever having performed leak testing of the devices.

The inspectors determined the certificate holder's failure to perform leak testing of the radioactive sources in the PGLD devices to be an AV. Specifically, the PGLD devices were not leak tested for Am-241 contamination. The AV could be determined to be of safety significance because of the large number of PGLD devices that have not been leak tested for an extended period. In addition, since Am-241 contamination has been detected in the waste water from the refurbishment and cleaning processes, indicating that some of the PGLD devices could be leaking. The leaking sources were not identified and removed from service (see the NRC Enforcement Policy Section 6.7.d.4, for additional information)."

USEC Response

For the same reasons discussed above, USEC denies this AV. The PGLDs in USEC's possession are exempt from NRC regulation, and therefore not subject to leak testing requirements derived from the general "Radiation protection programs" regulation – 10 CFR § 20.1101.

Furthermore, the AV generally references Section 5.3 of the Paducah SAR. Section 5.3.4.2 of the SAR addresses, among other things, leak testing of sealed sources. Whether or not the PGLDs are considered "sealed sources," any such leak testing requirement would only apply to a non-exempt PGLD. The exemptions discussed above remove the exempt PGLDs from the ambit of this section of the SAR. Thus, there is no noncompliance with the leak test provisions of Section 5.3 of the SAR.

I. Reason for the Violation

USEC has denied the AV.

II. Corrective Actions Taken

None.

V. Corrective Actions to Be Taken

None.

IV. Date of Full Compliance

USEC is currently in full compliance.

Restatement of Apparent Violation 4

4. “Failure to Perform Inventory of the PGLD Devices (AV 70-7001/2012-005-04

The inspectors identified an AV of 10 CFR 20.1101 and Section 6.2.4 of the certificate holder’s procedure CP2-HP-RP1046, ‘Sealed Radioactive Source Control,’ for the failure to perform physical inventory of radioactive sources contained in the PGLD devices for approximately 4,800 devices.

The inspectors determined the certificate holder’s failure to perform physical inventory to account for the radioactive sources in the PGLD devices to be an AV. The certificate holder has not maintained records or listing documents to identify each PGLD device by unique identifier or serial number. In addition, the certificate holder did not know how many PGLD devices were actually possessed and did not know the number of devices in various locations throughout the plant site, for approximately a total 4,800 devices, including devices in use and storage. The AV could be determined to be safety significant because failure to perform physical inventories could be a contributor to the lack of controls resulting in AV 70 7001/2012-005-01 described above (see NRC Enforcement Policy Section 6.7.d.3 for additional information).”

USEC Response

For the same reasons discussed above, USEC denies this AV. The PGLDs in USEC’s possession are exempt from NRC regulation, and therefore not subject to the physical inventory requirements derived from the general “Radiation protection programs” regulation – 10 CFR § 20.1101.

Furthermore, the AV references Section 6.2.4 of USEC procedure CP2-HP-RP1046 “Sealed Radioactive Source Control.” Section 6.2.4 requires, among other things, that “[t]he sealed radioactive source custodian shall perform [certain inventories] at least **every six months....**” Emphasis in original. Again, whether or not the PGLDs are considered “sealed sources,” any such inventory requirement would only apply to a non-exempt PGLD. The exemptions discussed above remove the exempt PGLDs from the ambit of this procedure. Thus, there is no noncompliance with the Section 6.2.4 inventory requirements of the procedure.

I. Reason for the Violation

USEC has denied the AV.

II. Corrective Actions Taken

None.

VI. Corrective Actions to Be Taken

None.

IV. Date of Full Compliance

USEC is currently in full compliance.

Restatement of Apparent Violation 5

5. "Failure to Perform Surveys to Assess Radiological Hazards Associated with PGLD Maintenance Activities (AV 70-7001/2012-005-05)"

The inspectors identified an AV of 10 CFR 20.1501 for the failure to perform surveys to assure compliance with limits for worker radiation exposure to Am-241 and to assess the radiological hazards associated with installation and removal, maintenance, cleaning, refurbishment, and the testing/calibration of PGLD devices. Specifically, the certificate holder did not conduct radiation level surveys and contamination surveys in the workbench areas and of the equipment handled in the disassembly, maintenance, cleaning and washing, refurbishment, and testing and calibration of the PGLD devices to demonstrate the compliance with the dose limits of 10 CFR 20.

The inspectors determined that the certificate holder's failure to perform work support surveys for the PGLD maintenance activities could be safety significant because PGLD devices have not been tested for leakage and could be leaking contamination. Specifically, Am-241 has been detected in the waste water from the maintenance and cleaning of PGLD devices (see the NRC Enforcement Policy Section 6.7.d.3 for additional information)."

USEC Response

For the same reasons discussed above, USEC denies this AV. USEC's possession and use of the PGLDs are exempt from NRC regulation, and therefore not subject to the survey requirements set forth in 10 CFR § 20.1501.

I. Reason for the Violation

USEC has denied the AV.

II. Corrective Actions Taken

None.

III. Corrective Actions to Be Taken

None.

IV. Date of Full Compliance

USEC is currently in full compliance.

Restatement of Apparent Violation 6

6. “Failure to Label Several PGLD Devices (AV 70-7001/2012-005-06)”

The inspectors identified an AV of 10 CFR 20.1904 for the failure to ensure several PGLD devices were properly labeled with the radioactive material warnings and prohibitions and statements to provide sufficient information to permit individuals handling or using the devices to take precautions to avoid or minimize exposure. Specifically, several PGLD devices did not bear a label that identified the Am-241 radionuclide or the quantity of radioactivity, nor did it otherwise bear the words ‘CAUTION, RADIOACTIVE MATERIAL,’ or ‘DANGER, RADIOACTIVE MATERIAL.’

The inspectors determined the certificate holder’s failure to ensure the PGLD devices were labeled to identify the radiologic hazards and precautions to be an AV of 10 CFR 20.1904. The AV could be safety significant because without the label, PGLD devices have no markings to indicate that the devices contain radioactive materials that require special handling. In addition, the certificate holder did not know how many PGLD devices were missing the labeling. The absence of the labeling of the PGLD devices, if left uncorrected, could contribute to a more significant safety concern because failure to label devices could contribute to the inadvertent disposal or mishandling of licensed materials similar to the circumstance identified in AV 70 7001/2012-005-01 described above (see NRC Enforcement Policy Section 6.7.d for additional information).”

USEC Response

For the same reasons discussed above, USEC denies this AV. The PGLDs in USEC’s possession are exempt from NRC regulation, and therefore not subject to the labeling requirements set forth in 10 CFR § 20.1904. Section 20.1904 explicitly applies only to containers of “licensed material.”

I. Reason for the Violation

USEC has denied the AV.

II. Corrective Actions Taken

None.

III. Corrective Actions to Be Taken

None.

IV. Date of Full Compliance

USEC is currently in full compliance.

**UNITED STATES ENRICHMENT CORPORATION (USEC)
RESPONSE TO APPARENT VIOLATIONS IN EA-12-235**

Supporting Materials

1. **34 Fed. Reg. 18,870 "Notice of Exemption of Fire Detection Units," dated November 26, 1969**
2. **35 Fed. Reg. 6018 "Notice of Exemption of Fire Detection Units; Correction," dated April 11, 1970**
3. **AEC License No. 29-08864-04E, Pyrotronics Incorporated**

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NOTICES

[Docket No. 19617]
**NORTH CAROLINA POINTS SERVICE
INVESTIGATION**

Notice of Oral Argument

Notice is hereby given, pursuant to the provisions of the Federal Aviation Act of 1958, as amended, that oral argument in the above-entitled matter is assigned to be heard by the Board on December 17, 1969, at 10:00 a.m., e.s.t., in Room 1027, Universal Building, 1825 Connecticut Avenue NW., Washington, D.C.

Dated at Washington, D.C., November 20, 1969.

[SEAL] **RALPH L. WYER,**
Associate Chief Examiner.

[F.R. Doc. 69-16035; Filed, Nov. 25, 1969;
8:45 a.m.]

**DEPARTMENT OF HEALTH,
EDUCATION, AND WELFARE**

**Food and Drug Administration
ECONOMICS LABORATORY, INC.**

**Notice of Filing of Petition Regarding
Food Additives**

Pursuant to the provisions of the Federal Food, Drug, and Cosmetic Act (sec. 409(b) (5), 72 Stat. 1786; 21 U.S.C. 348 (b) (5)), notice is given that a petition (FAP Q32464) has been filed by Economics Laboratory, Inc., Osborn Building, St. Paul, Minn. 55102, proposing that § 151.2547 Sanitizing solutions (21 CFR 121.2547) be amended to provide for the safe use of a solution containing triethanolamine outyl sulfate iodine complex and components generally recognized as safe as a sanitizing solution on food-processing equipment and utensils and on beverage containers, subject to the limitation that such solutions will provide not more than 25 parts per million titratable iodine.

Dated: November 18, 1969.

R. E. DUGAN,
Acting Associate Commissioner
for Compliance.

[F.R. Doc. 69-14019; Filed, Nov. 25, 1969;
8:45 a.m.]

GEIGY CHEMICAL CORP.

**Notice of Filing of Petition Regarding
Pesticide Chemicals**

Pursuant to the provisions of the Federal Food, Drug, and Cosmetic Act (sec. 408(d) (1), 68 Stat. 512; 21 U.S.C. 346a (d) (1)), notice is given that a petition (PF 070908) has been filed by Geigy Chemical Corp., Ardsley, N.Y. 10502, proposing the establishment of tolerances (21 CFR 120.258) for residues of the herbicide 2-ethylamino-4-isopropylamino-6-methylthio-s-triazine in or on the raw agricultural commodities corn forage and fodder at 0.5 part per million and corn grain (kernels plus cob with husks removed) at 0.25 part per million.

The analytical method proposed in the petition for determining residues of the herbicide is a gas chromatographic procedure using a microcoulometric detector with a sulfur-specific titration cell.

Dated: November 19, 1969.

R. E. DUGAN,
Acting Associate Commissioner
for Compliance.

[F.R. Doc. 69-14014; Filed, Nov. 25, 1969;
8:45 a.m.]

ATOMIC ENERGY COMMISSION

PYROTRONICS, INC.

**Notice of Exemption of Fire Detection
Units**

Models F5A, F3.5 (formerly F2.5A), and F6 fire detection devices containing americium 241, distributed by Pyrotronics, Inc., prior to the issuance of AEC License No. 29-03884-04E on August 28, 1969, which authorized the distribution of these devices to persons exempt from AEC licensing requirements, have been found to meet the safety criteria set forth in § 32.27 of 10 CFR Part 32 for gas and aerosol detectors containing byproduct materials for use under the class exemption in § 30.20 of 10 CFR Part 30. These devices were previously distributed under AEC License No. GL-133 prior to the promulgation of § 30.20. However, for the purposes of the exemption in § 30.20, such license shall be deemed to have been issued under § 32.26, 10 CFR Part 32. To the extent that persons in non-Agreement States other than manufacturers, processors, producers, or importers of such devices, receive, possess, use, transfer, export, own or acquire devices manufactured in accordance with that license, they are hereby deemed exempt from the requirements for a license set forth in Section 81 of the Atomic Energy Act of 1954, as amended, and from AEC regulations in 10 CFR Parts 20 and 30-36.

Dated at Bethesda, Md., November 19, 1969.

For the Atomic Energy Commission.

J. A. McBRIDE,

Director,

Division of Materials Licensing.

[F.R. Doc. 69-14032; Filed, Nov. 25, 1969;
8:45 a.m.]

FEDERAL POWER COMMISSION

[Docket No. RP70-469, etc.]

HUMBLE OIL & REFINING CO. ET AL.

**Order Providing for Hearing on and
Suspension of Proposed Changes in
Rates, and Allowing Rate Changes
To Become Effective Subject to
Refund¹**

NOVEMBER, 14, 1969.

The respondents named herein have filed proposed changes in rates and

¹ Does not consolidate for hearing or dispose of the several matters herein.

charges of currently effective rate schedules for sales of natural gas under Commission jurisdiction, as set forth in Appendix A hereof.

The proposed changed rates and charges may be unjust, unreasonable, unduly discriminatory, or preferential, or otherwise unlawful.

The Commission finds: It is in the public interest and consistent with the Natural Gas Act that the Commission enter upon hearings regarding the lawfulness of the proposed changes, and that the supplements herein be suspended and their use be deferred as ordered below.

The Commission orders:

(A) Under the Natural Gas Act, particularly sections 4 and 15, the regulations pertaining thereto (18 CFR Ch. I), and the Commission's rules of practice and procedure, public hearings shall be held concerning the lawfulness of the proposed changes.

(B) Pending hearings and decisions thereon, the rate supplements herein are suspended and their use deferred until date shown in the "Date Suspended Until" column, and thereafter until made effective as prescribed by the Natural Gas Act: *Provided, however*, That the supplements to the rate schedules filed by Respondents, as set forth herein, shall become effective subject to refund on the date and in the manner herein prescribed if within 30 days from the date of the issuance of this order Respondents shall each execute and file under its above-designated docket number with the Secretary of the Commission its agreement and undertaking to comply with the refunding and reporting procedure required by the Natural Gas Act and § 154.102 of the regulations thereunder, accompanied by a certificate showing service of copies thereof upon all purchasers under the rate schedule involved. Unless respondents are advised to the contrary within 15 days after the filing of their respective agreements and undertakings, such agreements and undertakings shall be deemed to have been accepted.

(C) Until otherwise ordered by the Commission, neither the suspended supplements, nor the rate schedules sought to be altered, shall be changed until disposition of these proceedings or expiration of the suspension period.

(D) Notices of intervention or petitions to intervene may be filed with the Federal Power Commission, Washington, D.C. 20426, in accordance with the rules of practice and procedure (18 CFR 1.8 and 1.37(f)) on or before January 1, 1970.

By the Commission.

[SEAL] **GORDON M. GRANT,**
Secretary.

¹ If an acceptable general undertaking, as provided in Order No. 377, has previously been filed by a producer, then it will not be necessary for that producer to file an agreement and undertaking as provided herein. In such circumstances the producer's proposed increased rate will become effective as of the expiration of the suspension period without any further action by the producer.

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NOTICES

Enclosure 2
GDP 13-1009
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ATOMIC ENERGY COMMISSION

[Dockets Nos. 50-354, 50-355]

PUBLIC SERVICE ELECTRIC AND GAS CO.

Notice of Receipt of Application for Construction Permits and Facility Licenses

Public Service Electric and Gas Co., 80 Park Place, Newark, N.J. 07101, pursuant to section 104(b) of the Atomic Energy Act of 1954, as amended, has filed an application dated February 26, 1970, for authorization to construct and operate two single cycle, forced circulation, boiling water nuclear reactors on the applicant's site of approximately 580 acres located in Bordentown Township, Burlington County, N.J. The proposed site is situated on Newbold Island, which is in the Delaware River approximately 5 miles south of the city limits of Trenton, N.J., and approximately 11 miles northeast of the Philadelphia city limits.

The proposed nuclear reactors, designated by the applicant as the Newbold Island Nuclear Generating Station, are each designed for initial operation at approximately 3,298 megawatts (thermal) with a net electrical output of approximately 1,088 megawatts per unit.

A copy of the application is available for public inspection at the Commission's Public Document Room, 1717 H Street NW., Washington, D.C.

Dated at Bethesda, Md., this 3d day of April 1970.

For the Atomic Energy Commission.

F. Schmeizler,

Acting Director,
Division of Reactor Licensing.

[F.R. Doc. 70-4416; Filed, Apr. 10, 1970;
8:45 a.m.]

PYROTRONICS, INC.

Notice of Exemption of Fire Detection Units; Correction

The Notice of Exemption of Fire Detection Units published in the *FEDERAL REGISTER* (24 F.R. 18870) on November 26, 1969, F.R. Doc. 69-14032, was incorrect in that it omitted Model F5B and referred to Model F3.5 (formerly F3.5A) instead of Model F3/5. This notice is corrected to read as follows:

Models F5A, F5B, F3/5A, and F6 fire detection devices containing americium-241, distributed by Pyrotronics, Inc., prior to the issuance of AEC License No. 29-08884-04E on August 28, 1969, which authorized the distribution of these devices to persons exempt from AEC licensing requirements, have been found to meet the safety criteria set forth in § 32.37 of 10 CFR Part 32 for gas and aerosol detectors containing hyproduct materials for use under the class exemption in § 30.20 of 10 CFR Part 30. These devices were previously distributed under AEC License No. GL-133 prior to the promulgation of § 30.20. However, for the

purposes of the exemption in § 30.20, such license shall be deemed to have been issued under § 32.26, 10 CFR Part 32. To the extent that persons in non-Agreement States other than manufacturers, processors, producers, or importers of such devices, receive, possess, use, transfer, export, own or acquire devices manufactured in accordance with that license, they are hereby deemed exempt from the requirements for a license set forth in section 81 of the Atomic Energy Act of 1954, as amended, and from AEC regulations in 10 CFR Parts 20 and 30-36.

Dated at Bethesda, Md., April 6, 1970.

For the Atomic Energy Commission.

J. A. McBRIDE,

Director,
Division of Materials Licensing.

[F.R. Doc. 70-4448; Filed, Apr. 10, 1970;
8:47 a.m.]

[Docket No. 50-2]

REGENTS OF THE UNIVERSITY OF MICHIGAN

Notice of Issuance of Facility License Amendment

The Atomic Energy Commission (the Commission) has issued, effective as of the date of issuance, Amendment No. 20 to Facility License No. E-28, as amended. The license authorizes The Regents of The University of Michigan to possess, use and operate its Ford Nuclear Reactor (FNR) located on the University's campus at Ann Arbor, Mich., at steady-state power levels up to a maximum of 2 megawatts (thermal). The amendment revises the license to authorize a temporary increase in the excess reactivity limits from 2 percent to 3.5 percent delta k/k to permit operation of the FNR for the performance of tests to evaluate the reactivity worth of a safety rod which is being developed for possible future use in the FNR. The amendment also limits the operating power level for the tests to 100 kw. and permits the reactor scram point to be set at 125 kw.

The Commission has reviewed and evaluated the predicted nuclear and thermal-hydraulic performances of the tests and has concluded that the proposed test can be performed at a power level of 100 kw. with reasonable assurance that the health and safety of the public will not be endangered.

The Commission has found that the application for the amendment complies with the requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations published in 10 CFR Chapter I. The Commission has made the findings required by the Act and the Commission's regulations which are set forth in the amendment, and has concluded that the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Within fifteen (15) days from the date of publication of the notice in the *FEDERAL REGISTER*, the applicant may file a

request for a hearing and any person whose interest may be affected by this proceeding may file a petition for leave to intervene. Requests for a hearing and petitions to intervene shall be filed in accordance with the Commission's "Rules of Practice" in 10 CFR Part 2. If a request for a hearing or a petition for leave to intervene is filed within the time prescribed in this notice, the Commission will issue at notice of hearing or an appropriate order.

For further details with respect to this amendment, see (1) the licensee's application for license amendment dated December 11, 1969, and (2) the amendment to the facility license, which are available for public inspection at the Commission's Public Document Room at 1717 H Street NW., Washington, D.C. Copies of item (2) above may be obtained upon request addressed to the Atomic Energy Commission, Washington, D.C. 20548, Attention: Director, Division of Reactor Licensing.

Dated at Bethesda, Md., this 3d day of April 1970.

For the Atomic Energy Commission.

DONALD J. SKOVHOLZ,
Assistant Director for Reactor
Operations, Division of Re-
actor Licensing.

[F.R. Doc. 70-4444; Filed, Apr. 10, 1970;
8:47 a.m.]

CIVIL AERONAUTICS BOARD

[Docket No. 21401; Order 70-4-25]

FRONTIER AIRLINES, INC.

Order Granting Temporary Suspension and Setting Application for Hearing

Adopted by the Civil Aeronautics Board at its office in Washington, D.C., on the 7th day of April 1970.

Application of Frontier Airlines, Inc., Docket 21401, for temporary suspension and deletion of service.

On September 8, 1969, Frontier Airlines, Inc. (Frontier), filed an application, Docket 21401, requesting that it be authorized to temporarily suspend service at Miles City, Glendive, Sidney, Wolf Point, Glasgow, Havre, and Lewistown, Mont., and Williston, N. Dak. Frontier also seeks suspension of its authority to serve segment 12 of route 73¹ and between Billings, Miles City, Glendive, Sidney, Williston, and Minot of segment 7.² Further, Frontier seeks deletion of the

¹ Segment 12 of route 73 is "between the terminal point Great Falls, Montana, the intermediate points Havre, Glasgow, Wolf Point, and Sidney, Montana, and the terminal point Williston, North Dakota."

² Segment 7 is "Between the terminal point Billings, Montana, the intermediate points Miles City, Glendive, and Sidney, Montana, and Williston and Minot, North Dakota, and the terminal point Bismarck-Mandan, North Dakota." Frontier desires to retain the Minot, N. Dak.-Bismarck-Mandan, N. Dak. portion of segment 7.

FEB-19-2013 14:46

NRC PDR

F.002

U.S. ATOMIC ENERGY COMMISSION		
BYPRODUCT MATERIAL LICENSE		
<p>Issued pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter I, Parts 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, and in reliance on statements and representations heretofore made by the licensee and its agents in connection with the issuance of this license, and in reliance on the licensee's agreement to accept the terms and conditions of this license, and to use such byproduct material for the purposes and at the places designated below, and to maintain such byproduct material in accordance with the conditions specified in Section 169 of the Atomic Energy Act of 1954, and is subject to all applicable rules, regulations, and orders of the Atomic Energy Commission, and to any conditions specified below.</p>		
<p>1. Licensee Pyrotechnics, Incorporated 8 Ridgedale Avenue Cedar Knolls, New Jersey 07007</p>		<p>2. License number: 29-08564-04E</p>
		<p>3. Expiration date: July 31, 1974</p>
		<p>4. Reference No.</p>
<p>5. Byproduct material (element and mass number)</p>	<p>6. Chemical and/or physical form</p>	<p>7. Maximum amount of radioactivity which licensee may possess at any one time</p>
<p>Americium 241</p>	<p>U. S. Radium Model LAB 204-1A or Radiochemical Centre Model AM-1015</p>	
<p>8. Authorized use</p> <p>The licensee is authorized to distribute Pyrotechnics Models F5A, F5B, F5C (formerly F3/5A) and P6 fire detection devices to persons exempt from the requirements for a license pursuant to Section 30.20, 10 CFR 30.10-CIA 22, and the terms of this license.</p>		
<p>9. CONDITIONS</p>		
<p>10. Each device distributed under this license shall contain not more than the amount of Americium 241 listed in the following table:</p>		
Device Model	Maximum Activity per Device	
F5A	130 microcuries	
F5B	80 microcuries	
F3/5A	80 microcuries	
P6	15 microcuries	

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NRC PDR

P.003

ATOMIC ENERGY COMMISSION

MATERIAL LICENSE

Supplementary Sheet

The licensee shall file an annual report with the Director, Office of Materials Licensing, U. S. Atomic Energy Commission, Washington, D. C., stating the total quantity of byproduct material distributed during the term of this license during the reporting period. The report shall cover the year ending June 30 and shall be filed within 90 days thereafter.

TOTAL P.003