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A. STOTLE

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Richard S. Salzman, Chairman  
Dr. Lawrence R. Quarles  
Michael C. Farrar

II  
Murray | Lieberman  
Burns | Cyr | Bachma,  
FI

In the Matter of )  
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RADIATION TECHNOLOGY, INC. )  
 )  
Lake Denmark Road )  
Rockaway, New Jersey 07866 )

Byproduct Material License  
No. 29-13613-02

Dr. Martin A. Welt, Rockaway, New Jersey, for  
Radiation Technology, Inc., licensee.

Messrs. James P. Murray, James Lieberman, Stephen  
G. Burns and Ms. Karen D. Cyr for the Nuclear  
Regulatory Commission staff.

DECISION

October 16, 1979  
(ALAB-567)

This matter concerns charges levelled by the Director of Inspection and Enforcement that Radiation Technology violated conditions of its byproduct material license and related Commission safety regulations. After a hearing, the presiding officer upheld seven of the Director's nine charges and assessed \$3,300 in civil penalties against the licensee. ALJ-78-4, 8 NRC 655 (1978). Both sides appeal.

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I.

Radiation Technology performs general purpose irradiation of various industrial materials for its customers and engages in research and development of radiation processing techniques for industrial purposes. Its business requires the use of cobalt-60, a radioactive "byproduct material" within the meaning of section 11(e) of the Atomic Energy Act.<sup>1/</sup> The Act makes it unlawful to possess or use byproduct material except as licensed by the Commission and in accordance with Commission regulations.<sup>2/</sup> The latter expressly provide that the Commission may inspect a licensee's premises and facilities at reasonable times to insure its compliance.<sup>3/</sup>

The Commission issued Radiation Technology a byproduct material license in 1971. Under its terms, the company may possess and use cobalt-60 in an industrial cell irradiator and a pool irradiator for radiation of medical, cosmetic,

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<sup>1/</sup> 42 U.S.C. §2014(e). See also 10 C.F.R. §§30.4(d) and 30.71.

<sup>2/</sup> 42 U.S.C. §2111.

<sup>3/</sup> 10 C.F.R. §30.52. Section 161c of the Atomic Energy Act, 42 U.S.C. §2201(c), authorizes the Commission to provide for inspections as necessary to effectuate the purposes of the Act.

and enzyme materials and production of radiation-induced polymeric material.<sup>4/</sup>

Inspections of the company's Rockaway, New Jersey, facility on October 27 and November 1, 1976 by Commission representatives disclosed a series of apparent infractions of Commission regulations and the company's license. In brief, these involved Radiation Technology's failure (1) to inform the Commission that it had shut down its pool irradiator because of increasing radioactivity levels and that its tests of the pool water for a leaking radioactive source had yielded impermissibly high results; (2) to instruct employees adequately in radiation protection measures; (3) to limit radiation levels in unrestricted areas of the facility; (4) to control radioactive material to prevent its unauthorized removal from the premises; (5) to post proper warnings in radiation areas and on containers of radioactive material; (6) to survey the facility for the existence and magnitude of radiation hazards; and (7) to obtain an approved operator's license for an employee before permitting his unsupervised use of radioactive material.

Section 234 of the Atomic Energy Act authorizes the Commission to impose civil monetary penalties for violation

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<sup>4/</sup> ALJ-78-4, 8 NRC at 656.

of the Act, Commission regulations, and license conditions.<sup>5/</sup> Before instituting a civil penalty proceeding, Commission regulations require the Director of Inspection and Enforcement to serve a written notice of violation and proposed penalty upon the person charged, who then has twenty days to pay the penalty or answer the charges. The Director must consider any answer to his charges in deciding whether to drop them or to impose the penalty in whole or in part. If the person charged is dissatisfied with the Director's decision, he may demand a formal evidentiary hearing before a presiding officer with authority to dismiss the proceeding or to impose or mitigate the penalty. 10 C.F.R. §2.205.

On January 5, 1977, after reviewing the inspectors' reports and concluding that Radiation Technology committed the violations, the Director issued a "Notice of Violation and Proposed Imposition of Civil Penalties of \$4,800." This notice apprised Radiation Technology of the charges against it and of its right to respond, which it did on January 31, 1977. After considering this response and finding it to be inadequate, the Director issued an "Order Imposing Civil Penalties" on March 14, 1977. Radiation Technology thereupon

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<sup>5/</sup> 42 U.S.C. §2282.

demanded a hearing on the charges and the Commission referred the matter to an administrative law judge for determination.

Dr. Martin A. Welt, Radiation Technology's president and a physicist formerly employed by the Atomic Energy Commission, chose to represent his company at the hearing without assistance of counsel. Dr. Welt opposed the imposition of civil penalties on both procedural and substantive grounds. After an evidentiary hearing, the presiding officer dismissed two of the nine charges for failure of proof and imposed civil penalties of \$3,300 for the remaining seven violations, which he held to be sustained by reliable, probative and substantial evidence in the record.<sup>6/</sup>

Radiation Technology's appeal raises both procedural and substantive objections to the charges levelled against it. We consider the former in part II of this opinion, which follows immediately, and the latter in part III, beginning at p. 16. We evaluate the staff's appeal from the judge's dismissal of two of the charges in part IV, infra, at p. 28.

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<sup>6/</sup> ALJ-78-4, 8 NRC 655 (1978).

II.

1. Denial of Due Process in Deciding to Press Charges.

Radiation Technology asserts that the Director's decision to proceed against it rests on "off-the-record," ex-parte reports made by NRC safety inspectors and complains that it had no opportunity to cross-examine the Director to determine whether he had been improperly influenced by them. Alleging that the "ultimate fact finder" was thus privy to "allegations not on the record" and therefore that its "right of due process was violated," the company contends that the charges against it may not stand. <sup>7/</sup>

The answer to this contention is that it rests on a misconception. The Director is not the ultimate fact finder in civil penalty matters. Commission regulations afford one from whom a civil penalty is sought the right to a hearing on the charges against it. 10 C.F.R. §2.205(d) and (e). At that hearing, the Director must prove his allegations by a preponderance of the reliable, probative and substantial evidence. <sup>8/</sup> It is the presiding officer at that hearing, not the Director, who finally determines on the basis of the hearing record whether the charges are sustained and civil

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<sup>7/</sup> Licensee's Brief at 10.

<sup>8/</sup> 5 U.S.C. §556(d); 10 C.F.R. §2.732. The judge below applied that standard to the evidence bearing on each charge. 8 NRC at 667, 668, 669, 670, 671, 672 and 673.

penalties warranted. 10 C.F.R. §2.205(f).<sup>9/</sup> Cf., Brennan v. Occupational Safety & Health Review Com'n, 487 F.2d 438, 441-42 (8th Cir. 1973) (Secretary of Labor's proposed civil penalties under the Occupational Safety and Health Act final where accepted but subject to an administrative hearing and de novo review if contested).<sup>10/</sup>

In short, the Director's role in this situation is akin to that of a prosecutor. Subject to requirements that he give licensees written notice of specific violations and consider their responses in deciding whether penalties are warranted (requirements satisfied in this case, see pp. 4-5, supra), the Director may prefer charges, demand the payment of penalties (within statutory limits), and agree to compromise penalty cases without formal litigation -- "plea bargain," in a sense.<sup>11/</sup> The Director is not, however, obliged to hold a formal preliminary hearing before pressing charges. Furthermore, he may (and given the scope of his responsibilities undoubtedly he must) consult with his staff privately about

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<sup>9/</sup> The presiding officer's decision is itself subject to review by this Board, 10 C.F.R. §§2.762 and 2.785, and by the Commission, 10 C.F.R. §2.786.

<sup>10/</sup> 42 U.S.C. §2082; 10 C.F.R. §2.205(a)-(d). While not presented in this case, we note that the Supreme Court has upheld procedures whereby the members of administrative agencies receive the results of investigations, approve the filing of charges and then participate in the ensuing hearings as violating neither the Administrative Procedure Act nor due process of law. Withrow v. Larkin, 421 U.S. 35, 56 (1975).

<sup>11/</sup> See, In re Seeburg Corp., 20 Ad.L.2d 603, 614 (FTC 1966).

the course to be taken in a given case.<sup>12/</sup>

A licensee who thinks the Director has been ill-advised or mistaken has a remedy. It is not to cross-examine the Director's thought processes but to make him prove his case in an impartial hearing. The Federal Trade Commission has rejected arguments like those pressed upon us by Radiation Technology in terms we think persuasive:

The net effect of respondent's argument is that administrative due process requires that the informal settlement procedures should be converted into a preliminary trial on the Commission's decision to issue complaint. Neither the Administrative Procedure Act nor any other legislation warrants such a procedure. Respondent's rights will be fully protected in the adjudicative stage of this proceeding, which is subject to all the safeguards provided by the Administrative Procedure Act. Furthermore, the Commission's decision on whether to issue complaint is within its discretion. Preservation of the integrity of the administrative process precludes an inquiry into this agency's mental processes leading up to that decision.<sup>13/</sup>

The short of the matter is that Radiation Technology was afforded an impartial hearing at which its constitutional rights were fully protected. "The demands of due process do not require a hearing, at the initial stage or at any particular point or at more than one point in an administrative proceeding so long as the requisite hearing is held before the final order becomes effective." Opp Cotton Mills, Inc. v. Administrator, 312 U.S. 126, 152-53 (1941); Midwestern Gas

<sup>12/</sup> See also, Porter County Chapter v. NRC, F.2d, slip op. at 8-19 (D.C. Cir. No. 78-1559, September 6, 1979), discussing the analogous staff role in reactor licensing.

<sup>13/</sup> In re Seeburg Corp., supra, 20 Ad.L.2d at 614.

Transmission Co. v. FERC, 589 F.2d 603, 627 (D. C. Cir. 1978).

There is, therefore, no occasion to set aside the decision below for want of due process of law in the Director's determination to press charges against the company.<sup>14/</sup>

2. The Legality of the Commission Inspections.

(a) Commission officials did not obtain a judicial search warrant before they inspected Radiation Technology's premises. The findings that the company violated Commission regulations and the terms of its license in handling radioactive material rest on evidence obtained during those inspections. The company asserts that the lack of a warrant breached its Fourth Amendment right to be free from "unreasonable searches and seizures." It contends accordingly that the charges against it must fall because based upon unlawfully obtained evidence.<sup>15/</sup>

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<sup>14/</sup> This also disposes of Radiation Technology's claim that the charges against it were based on incompetently made inspections. Licensee's Brief at 6-9. Whether the inspections were sufficient to prefer charges was a decision for the Director; whether they were adequate to impose penalties was a matter tried before the administrative law judge de novo. It is the latter only which concerns us here.

<sup>15/</sup> Radiation Technology initially made an oral motion to the trial board to dismiss the proceeding on this ground. (Tr. 26). Judge Jensch reserved decision (Tr. 27) but, so far as we can determine, neither ruled from the bench later nor discussed the point in his decision. The most likely reason for the omission is the company's failure to preserve the point in its proposed findings of fact and conclusions of law. We might therefore treat the issue as waived. Florida Power & Light Co. (St. Lucie Plant, Unit 2), ALAB-280, 2 NRC 3, 4 fn. 2 (1975). The staff has not raised the waiver point, however. We elect to deal with the issue on the merits in the circumstances.

A judicial warrant is generally needed to inspect commercial as well as residential premises. This is the case even when the search is for purposes of protecting public health and safety and not to further a criminal prosecution. Marshall v. Barlow's, Inc., 436 U.S. 307, 325 (1978) (warrantless inspection of commercial premises pursuant to the Occupational Safety and Health Act of 1970 declared unconstitutional). But not all searches require warrants. The test is whether the party involved had a "reasonable expectation of privacy." Id. at 313. Some industries have a history of government oversight so pervasive that no reasonable expectation of privacy exists for those engaged in them. The Supreme Court explained in Marshall v. Barlow's that "[t]he element that distinguishes these enterprises from ordinary businesses is a long tradition of close government supervision, of which any person who chooses to enter such a business must already be aware. 'A central difference between those cases and this one is that businessmen engaged in such federally licensed and regulated enterprises accept the burdens as well as the benefits of their trade \* \* \*. The businessman in a regulated industry in effect consents to the restrictions placed upon him.'"<sup>16/</sup>

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<sup>16/</sup> 436 U.S. at 313 (citations omitted).

The Supreme Court referred to liquor (Colonnade Catering Corp. v. United States, 397 U.S. 72 (1970)) and firearms (United States v. Biswell, 406 U.S. 311 (1972)) as examples of pervasively regulated industries. We harbor no doubt that the industrial use of radioactive byproduct material is also among the class of businesses where no "expectation of privacy" may fairly be claimed. Under provisions of the Atomic Energy Act in force since its inception in 1946, those who would put byproduct material to commercial use have needed the Commission's authorization and have been subject to Commission inspections to insure compliance with license conditions and governing regulations. Atomic Energy Act of 1954, §81, as amended, 42 U.S.C. §2111. See Act of Aug. 1, 1946, c.724, §5, 60 Stat. 760. The acquisition, ownership, use, possession, manufacture, transfer, export and import of byproduct material have at all relevant times required Commission approval. Ibid. The Commission may "not permit the distribution of any byproduct material to any licensee, and shall recall or order the recall of any distributed material from any licensee, who is not equipped to observe or who fails to observe such safety standards to protect health as may be established by the Commission or who uses such material in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor or approved by the Commission." Ibid.

And to insure that licensees in fact implement statutory and regulatory safeguards against the radiological hazards associated with byproduct material, section 161o of the Act authorizes the Commission "to provide for such inspections of \* \* \* activities under licenses issued pursuant to [inter alia] section 81 [dealing with byproduct material licenses] as may be necessary \* \* \*."<sup>17/</sup>

Commission regulations implementing these provisions cover over one hundred printed pages in the Code of Federal Regulations (10 C.F.R. Parts 19-21, 30-35). Among them is express notice that (10 C.F.R. §30.52(a)):

Each licensee shall afford to the Commission at all reasonable times opportunity to inspect by-product material and the premises and facilities wherein byproduct material is used or stored.

These circumstances generate our agreement with the staff that industrial users of byproduct material are subject to a regime of pervasive federal government regulation.<sup>18/</sup> For the reasons elaborated in Marshall v. Barlow's, supra, these firms have no "expectation of privacy" in their use of radioactive substances. Accordingly, Commission inspectors were not required to obtain a judicial search warrant before entering, during scheduled working hours, premises Radiation

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<sup>17/</sup> 42 U.S.C. §2201(o).

<sup>18/</sup> See also, Union Electric Co. (Callaway Plant, Units 1 & 2), ALAB-527, 9 NRC 126, 139-42 (1979)(no "expectation of privacy" respecting activities reasonably related to the safe construction of a nuclear power plant).

Technology devoted to that purpose.<sup>19/</sup>

(b) One of the inspections involved in this case commenced at 7:30 A.M. and was conducted in the absence of Radiation Technology's senior management. The company complains that this violated a Commission regulation that it says limits inspections to "reasonable times" and gives it the right to have its representatives accompany the inspectors at all times.

Commission regulations do require inspections to be conducted at reasonable hours. 10 C.F.R. §30.52(a) (supra p. 12.) However, Radiation Technology's facility was open and byproduct material in use on the "night shift" when the inspectors arrived and the plant superintendent admitted them. Inspections of licensed activities during company-scheduled working hours are, in our judgment, reasonable per se. The Commission's regulations and license conditions are intended to protect those who work with byproduct material from the hazards of radioactivity. Because such hazards are not confined to "office hours," neither may Commission inspections be limited to those times.<sup>20/</sup>

<sup>19/</sup> For similar reasons, there was no occasion for the staff to have "probable cause" before inspecting Radiation Technology's use of licensed material during its scheduled hours of operation. At all events, the staff's awareness of licensee's past infractions and reports to it from employees and an outside source that the company was ignoring Commission safety regulations were ample cause to trigger the inspections in question.

<sup>20/</sup> A different question would arise if the inspectors had sought access to company records not readily available in the absence of their management custodians.

The company reads section 19.14(b) of the Commission's regulations as affording it an absolute right to accompany Commission safety inspectors on their rounds. Assuming arguendo that this section applies to the situation before us, <sup>21/</sup> it provides only that licensee's representatives "may" accompany Commission inspectors, not that they must. The record suggests that such representatives would have been given permission to do so -- had they been present. <sup>22/</sup> To adopt Radiation Technology's reading of the regulation would place the timing of inspections in the licensees' rather than the Commission's hands. The effective result would be to eliminate "surprise" inspections. <sup>23/</sup> This is

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<sup>21/</sup> Part 19 of the Commission regulations is primarily concerned with notices, instructions and reports to workers, and with related inspections. It affords those (other than the licensee) working with radioactive byproduct material opportunity to speak privately with Commission inspectors to avoid possible retaliation by their employer. 10 C.F.R. §§19.15 and 19.16. (See Callaway, supra, ALAB-527, 9 NRC 126.) Hence, 10 C.F.R. §19.14(b) provides that "[d]uring an inspection, Commission inspectors may consult privately with workers as specified in §19.15. The licensee or licensee's representatives may accompany Commission inspectors during other phases of an inspection." (Emphasis added.) Understood in context, therefore, §19.14(b) cannot be said to authorize a licensee's representative to accompany Commission safety inspectors at all times.

<sup>22/</sup> The plant superintendent did accompany the inspectors during the inspection's initial phases. Tr. 173-74, 212-14.

<sup>23/</sup> The inspections at issue were "routine" and "unannounced" to let the inspectors "see conditions as they actually are, not as they are told to us by members of the [licensee's] staff." Smith, Tr. 119.

manifestly inconsistent with the Commission's obligation to insure that its safety requirements are being followed at all times. The interpretation for which the company argues is hardly compelled by the face of section 19.14(b) and, given its result, we decline to adopt that reading.

3. The Need for a "Schedule of Fines."

The penalties imposed are within the limits established by section 234 of the Atomic Energy Act 42 U.S.C. §2282. Nevertheless, the company argues that the Commission can levy no penalties at all because it has not promulgated a formal "schedule of fines." We reject that contention. The statute imposes no such requirement; in any event, adequate guidance has been given to the industry about this subject. General criteria for enforcement actions were published in the Federal Register and, as modified from time to time, have not only been made generally available but have also been furnished directly to Commission licensees. See, 36 Fed. Reg. 16,894 (August 26, 1971), 37 Fed. Reg. 21,962 (October 17, 1972); 40 Fed. Reg. 820 (January 23, 1975). These criteria have been supplemented with a publicly available Staff Manual (Tr. fol. 107), promulgated by the Director of Inspection and Enforcement (who has delegated responsibility for

these matters under 10 C.F.R. §1.64). Included in that manual is a detailed discussion of how the staff goes about assessing whether a monetary penalty is appropriate and, if so, in what amount. Those steps were followed; the criteria were applied to this case and the licensee had fair notice of them. Nothing further was required.

We add only that assessing a penalty inherently calls for the exercise of informed judgment on a case-by-case basis. An absolute uniformity of sanctions (which the licensee appears to think necessary) is neither possible nor required. Butz v. Glover Livestock Commission Co., 411 U.S. 182, 186-69 (1973); Beall Const. Co. v. OSHRC, 507 F.2d 1041, 1046 (8th Cir. 1974); Brennan v. OSHRC, supra, 487 F.2d at 442.

### III.

The presiding officer sustained seven of the nine specific charges levelled by the Director of Inspection and Enforcement against Radiation Technology. The company has appealed every unfavorable ruling; we review them seriatim.

#### 1. Failure to Make Required Reports (Items 1 and 2).

Condition 13 of Radiation Technology's byproduct material license requires the company to test its sealed cobalt-60

sources for leaking radioactivity and specifies the procedures to be used in doing so. Should any test reveal 0.05 microcuries or more of removable contamination per 100 milliliter test sample, this must be reported to the Commission within 5 days. Commission regulations also direct licensees to notify NRC officials within 24 hours of any incident involving licensed material which may or does cause "a loss of one day or more of the operation of any facilities affected."<sup>24/</sup>

On September 2, 1975, company employees detected an increase in the level of radioactivity in licensee's "Research and Development" (R&D) pool water.<sup>25/</sup> Operations were discontinued at 9:00 P.M. that evening and the pool irradiator was shut down.<sup>26/</sup> The next day pool water samples were sent to an independent laboratory for analysis. On September 4th, a pencil of steel-encapsulated cobalt-60 was removed, sealed in a pipe and stored at the bottom of the pool as a "suspected leaker."<sup>27/</sup> Pool operations were resumed on September 10th, prior to receipt of the laboratory results on September 11th.<sup>28/</sup> These revealed 0.13

<sup>24/</sup> 10 C.F.R. §20.403(b)(3).

<sup>25/</sup> Haram at 4, fol. Tr. 1871; Smith at 3, fol. Tr. 107; Tr. 1953; see also, Licensee's Brief at 17.

<sup>26/</sup> Haram at 2, fol. Tr. 1871; Smith at 3, fol. Tr. 107; Tr. 1961; see also, Licensee's Brief at 22-23.

<sup>27/</sup> Haram, Attachment A, fol. Tr. 1871; Smith at 3, fol. Tr. 107; Tr. 1964; see also, Licensee's Brief at 22-23.

<sup>28/</sup> Haram, Attachment A, fol. Tr. 1871; Smith at 3, fol. Tr. 107; see also Licensee's Brief at 18.

microcuries of removable contamination in one sample.<sup>29/</sup> Neither the test results nor the shutdown was reported to the Commission.<sup>30/</sup> Based on these facts, the presiding officer imposed the civil penalties sought by the staff: \$500 for item 1 (failure to report leak test results) and \$500 for item 2 (failure to report pool irradiator shutdown).

Radiation Technology challenges these penalties. It argues that no violations occurred, that the pool water tests are not "leak tests," and that the pool was shut down solely because of "cloudy water" and not because of any "incident" involving radioactive material. These defenses are untenable. The company's license itself specifies that the pool water must be sampled and tested periodically as a means of leak detection.<sup>31/</sup> The company acknowledged that it had suspected a problem "pencil" to be leaking radioactivity; that radiation levels in the R&D pool were rising

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<sup>29/</sup> McClintock, fol. Tr. 107, Attachment 5 (Teledyne Isotopes Report of Analysis).

<sup>30/</sup> Licensee's Brief at 18, 21.

<sup>31/</sup> Item H of Supplemental Information submitted with letter dated November 3, 1970; Item 11 of Table II, revised November 17, 1979. Both are incorporated by reference in License Condition 13. — McClintock fol. Tr. 107, Attachment 15.

at the time pool operations were discontinued; that the pool water test results were of reportable magnitude; and that neither the test results nor the inactivation of the pool was reported.<sup>32/</sup> The licensee's Radiation Safety Officer at the time of the shutdown confirmed that the presence of increasing radioactivity was the cause for discontinuing pool operations; indeed, when he was told not to report the shutdown to the Commission, he resigned his post.<sup>33/</sup> The record thus amply supports the presiding officer's determinations that the pool water analyses were leak tests within the meaning of the company's license, that the R&D pool was shut down because of an incident involving radioactive material, and that these occurrences should have been reported promptly to Commission representatives.<sup>34/</sup> Accordingly, we affirm the imposition of the civil penalties for these two items.

2. Failure to Instruct Employees in Radiation Protection Measures (Item 3).

Commission regulations require that persons employed in "restricted areas"<sup>35/</sup> be taught procedures to minimize

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<sup>32/</sup> Licensee's Brief at 18, 21-23.

<sup>33/</sup> Haram, fol. Tr. 1871 at 1-2. In addition to his radiation safety responsibilities, Mr. Haram was also a vice president of the company.

<sup>34/</sup> ALJ-78-4, 8 NRC at 667-8.

<sup>35/</sup> 10 C.F.R. §19.12. A "restricted area" is any area access to which is controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials. 10 C.F.R. §19.3(e).

radiation exposure, the purposes and functions of protective devices, and applicable provisions of Commission regulations and license conditions. Charge 3 alleged that Radiation Technology's training program was inadequate, as demonstrated by the inspectors' discovery of two employees working in the room containing the company's R&D pool (a restricted area) who were ignorant of the radiation and contamination levels present and unaware of the proper method for using equipment to monitor their exposure. The staff demanded and the presiding officer imposed a \$500 civil penalty for this violation.

The basis of this action is cogently explained in the presiding officer's opinion. In affirming this ruling we need do no more than restate its salient points (8 NRC at 668-69):

\* \* \* Licensee's application indicated that a training program would be conducted. A measure of the effectiveness of this Licensee's program can be made from the admitted facts that the President of the Licensee did not know that two of his employees carried film badges inside their wallets located in their back pockets. That alone should indicate a complete failure of the training program for which the Licensee must assume responsibility. Without knowledge by employees of the radioactivity to which they may be exposed, protective measures cannot be taken to avoid overexposure. \* \* \* [T]he lack of training [is] shown by the fact that the employees placed film badges within their wearing apparel and wallets, which of course,

prevented accurate survey readings. This sort of responsiveness by employees to an asserted training program reflects a total failure to properly instruct and test the understanding of employees to justify the imposition of \$500 civil penalty.

36/  
We agree.

3. Failure to Post Proper Radiation Warnings.

(a) Warnings of Radiation Areas (Item 6).

Commission regulations require conspicuous posting of signs warning of "radiation areas" and "high radiation areas." 37/ In addition, licensees must control access to high radiation areas in existence for more than 30 days. 38/ Radiation Technology was charged with (1) failing to post the necessary warnings on doors leading into the R&D and

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36/ The company argues that this cannot be the basis of an infraction because the regulations state only that film badges or similar radiation detection equipment "shall be worn or carried" but do not specify where. 10 C.F.R. §20.202(b)(1). The short answer is that licensee's own supplier instructed that the badges are to be worn uncovered and facing the radiation source. McClintock, fol. Tr. 107, Attachment 7. In the face of this, licensee's continuing argument that the badges may appropriately be carried in wallets underscores the validity of the charge that employees received inadequate training.

37/ 10 C.F.R. §20.203(b) and (c). A radiation area is "any area, accessible to personnel, in which there exists radiation \* \* \* at such levels that a major portion of the body could receive in any one hour a dose in excess of 5 millirem \* \* \*." Id. at 20.202(b)(2). A high radiation area is defined in the same manner, except that the potential dose is in excess of 100 millirem. Id. at 20.202(b)(3).

38/ 10 C.F.R. §20.203(c).

receiving pool rooms, and in the latter room itself, as well as (2) not properly controlling access to the high radiation area in the receiving pool. 8 NRC at 659.

The presiding officer determined that these areas had not been posted as required and imposed a \$500 civil penalty for the omission. 8 NRC at 671. The company appeals principally on the ground that the inspectors' survey instruments were inaccurately calibrated. It reasons from this that there is insufficient proof that the locations cited were actually radiation areas. The reasoning is faulty. As far as posting is concerned, it is not the precise radiation level measured on a given day that is important. Rather, under the regulations, what triggers the need for cautionary signs is the possibility that permissible radiation dosage levels may be exceeded. The presiding officer found that potential to be present in the areas specified and the record supports his finding.<sup>39/</sup> Any doubt about the need for warning signs is eliminated by the terms of the company's license.<sup>40/</sup> The finding that proper warnings were not posted is supported by the weight of the evidence and merits no extended discussion on our part. The penalty is also appropriate; posting proper warnings about the existence of radiation

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<sup>39/</sup> McClintock at 7, Smith at 8, fol. Tr. 107; Tr. 261, 1602, 1918. See also Licensee's Brief at 36 (admitting that the bottom of the receiving pool is a high radiation area).

<sup>40/</sup> License condition 16 specifically requires posting both the interior and exterior entrances of the R&D room. McClintock, fol. Tr. 107, Attachment 15.

hazards is the very least that can be expected of licensees.

(b) Unlabeled Containers of Radioactive Material  
(Item 7).

Commission regulations require containers holding 1 microcurie or more of cobalt-60 to bear labels identifying their contents and providing information about minimizing or avoiding exposure to radioactivity.<sup>41/</sup> Radiation Technology was cited for failing to have such labels on containers of radioactive material in its receiving pool room and on certain other receptacles, i.e., the steel container and the 55-gallon drum specified in Item 4 (infra, p. 30). We agree with the presiding officer that grease pencil markings on the former and a sign propped up next to the latter do not satisfy the requirements for durable signs bearing the familiar purple and yellow radiation caution symbol and appropriate safety instructions. As the staff sensibly points out, "It should not be necessary to closely approach a container and peer at some handwritten grease pencil markings before receiving any idea that the container is the source of a

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<sup>41/</sup> 10 C.F.R. §20.203(f) and Part 20, Appendix C.

radioactive hazard."<sup>42/</sup> The \$50 civil penalty is affirmed.

4. Failure to Survey for Radiation Hazards (Item 8).

Under the governing regulations, a "survey" is "an evaluation of radiation hazards incident to the production, use, release, disposal or presence of radioactive materials or other sources of radiation," including where necessary physical examination of areas where such materials are in use or deposited and measurements of radiation levels and concentrations there. Licensees must conduct surveys periodically as necessary to insure that they are conforming to the Commission's "Standards for Protection Against Radiation," 10 C.F.R. Part 20.<sup>43/</sup> Item 8 in the Notice of Violation accused the company of failing to survey adequately (1) radiation levels in unrestricted areas, (2) individuals working in and around restricted areas, (3) liquid effluents discharged to unrestricted areas and (4) materials disposed of in a dumpster in

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<sup>42/</sup> The staff inspectors' survey meters were admittedly less than precisely calibrated. Even if off by a factor of three, as suggested by Dr. Welt (Tr. 47-48), their readings demonstrated radiation emanating from the two receptacles at levels well in excess of that calling for warning labels. The suggestion that the inspectors interrupted the company in the process of moving these containers into storage is not supported by the record. The containers were not in storage when the inspectors arrived and had not been for some time; further, there is no evidence that they were in the process of being moved, and they should have been properly labeled in the interim.

<sup>43/</sup> 10 C.F.R. §20.201.

an unrestricted area. The presiding officer found the charges sustained by the evidence and imposed a civil penalty of \$500 for these infractions.

The gist of these infractions is not in the presence or absence of any specific radiation level, but in the failure to check regularly for the presence of radiation hazards. The presiding officer found that the evidence sustained the specific charges (8 NRC at 672). That finding was compelled; in our judgment the record demonstrates the company's general carelessness about such matters. The civil penalty of \$500 is more than justified.<sup>44/</sup>

5. Failure to Obtain Commission Approval for an Unlicensed Employee's Use of Radioactive Material (Item 9).

Condition 12 of Radiation Technology's license allows the use of radioactive byproduct materials only by or under

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<sup>44/</sup> Licensee argues that there is "double jeopardy" involved because its citation for inadequate training and failure to survey for radiation are both based in part on the failure of two employees to wear film badges. We disagree; these are two separate infractions and some of the same evidence points to both. Thus, the employees' stuffing of film badges in their wallets indicates that correct usage was not impressed upon them. At the same time, this fact also demonstrates that the company never properly checked on the radiation exposure of these employees. An adequate survey of such exposure requires certainty that the badges are being worn in the restricted area at all times. As the company's radiation safety officer was unaware that employees were wearing film badges improperly, he had no way of knowing whether the badges were, in fact, being worn. The survey of radiation exposure for these employees was thus inadequate.

the supervision of specified employees who hold Commission licenses.<sup>45/</sup> Radiation Technology was charged with violating this condition by routinely permitting the unsupervised use of byproduct material by an unlicensed employee. The presiding officer found this to be the case and imposed a civil penalty of \$750.

As it did below, the company acknowledges the violation but asserts the existence of mitigating circumstances. The licensee says that the employee in question was in fact properly trained and subsequently obtained an operator's license without further training; hence, no hazard was created in permitting him to work without the required supervisor present and Item 9 was but a technical infraction. We disagree. The company was cited for a similar violation previously; its response then was a confession and a promise of future compliance.<sup>46/</sup> Those assurances notwithstanding, Radiation Technology resumed operations in violation of this license condition. The

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<sup>45/</sup> McClintock, fol. Tr. 107, Attachment 9.

<sup>46/</sup> McClintock, fol. Tr. 107, Attachment 12 (letter of February 14, 1975 from Radiation Technology's Vice President).

circumstances presented are not cause for mitigation but evidence of a repeated disregard for Commission regulations. A \$750 civil penalty is entirely appropriate.

#### IV.

The staff excepts to that portion of the decision below dismissing two of its charges against Radiation Technology as unproven. The company responds that the decision is correct on these matters and that the staff's appeal rests on a misreading of the record. Licensee argues preliminarily, however, that Commission regulations in any event preclude an appeal by the staff. We turn to this issue first.

##### 1. The Staff's Right to Appeal.

The company's argument that the staff may not appeal rests on its reading of the Rules of Practice. Under section 2.704(a) of the Rules, "[t]he Commission may provide in the notice of hearing that one or more members of the Commission, or an atomic safety and licensing board, or a named officer who has been delegated final authority in the matter, shall preside." 10 C.F.R. §2.704(a). Seizing upon the italicized

phrase as the basis for its position, the company argues that

the initial decision is that of the Commission itself. It is absurd to argue that the NRC may appeal to the NRC the decision of the NRC. In essence, the final decision of the Administrative Judge is now res judicata \* \* \*. To allow an NRC appeal is tantamount to a strict denial of due process in that an appellant could be asked to continually defend himself of the same allegations regardless of the prior outcome of an Administrative Hearing in accordance with Agency procedures. 47/

The answer, of course, is that the provisions of the Rules of Practice are not to be read in isolation but to be understood in context. The "final authority" mentioned in section 2.704 is to preside at the hearing (the section is headed "Designation of presiding officer, disqualification, unavailability") and to render an "initial decision" when it is completed. 10 C.F.R. §2.760. That decision becomes the "final action of the Commission" only if not reviewed on its own initiative and no "exceptions are taken in accordance with §2.762." 10 C.F.R. §2.760(a). Under section 2.762, by filing exceptions "any party may take an appeal" (emphasis added); lest there be any doubt about it, the provision expressly treats the staff as a party for these purposes. 10 C.F.R. §2.762. Thus, when read as a whole, the Rules of Practice will not bear the construction Radiation Technology would give them.

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47/ Licensee's Argument in Response to "Brief in Support of Staff Position," filed April 12, 1979.

The company's argument that "the final decision of the Administrative Judge is now res judicata" where he ruled in its favor but subject to appellate review where he ruled against the company is, at best, inconsistent. Be that as it may, the Commission has long construed its Rules to allow the staff to appeal from initial decisions. New York Shipbuilding Corporation (Byproduct Material License No. 29-2204-2), 1 AEC 842 (1961); Hamlin Testing Laboratories, Inc. (Byproduct Material License No. 21-6564-1), 2 AEC 423 (1964), affirmed sub nom. Hamlin Testing Lab., Inc. v. AEC, 357 F.2d 632 (6th Cir. 1966) (initial decision in favor of byproduct materials licensee reversed by the Commission on the staff's appeal). As Radiation Technology offers no satisfactory reason why a different rule should apply in its case, the Commission's reading of its own regulations is controlling. Northern Indiana Public Service Co. v. Porter County Chapter, 423 U.S. 12, 14-15 (1975). Consequently, whether considered as a matter of law or of practice, the contention that the staff may not appeal an unfavorable ruling is incorrect.<sup>48/</sup>

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<sup>48/</sup> To avoid any confusion, we point out -- perhaps unnecessarily -- that the licensee's argument (quoted at p. 28, supra) is founded on an incorrect premise insofar as it refers indiscriminately to the "NRC" without distinguishing between (1) the staff, which was an adversary party to the proceeding; and (2) the presiding officer, ourselves, and the Commissioners, all of whom function solely in an adjudicatory capacity in these proceedings. Properly understood, the staff is appealing the presiding officer's decision to us (as the Commission's delegate for handling appeals).

2. Excessive Radiation Levels (Item 4).

Commission regulations require byproduct material licensees to control radiation levels on their premises. Under section 20.105(b), radiation must be so limited that an individual continuously present in an "unrestricted area"<sup>49/</sup> could not receive a dose of more than two millirems in any one hour (2 mR/h) or more than 100 millirems in any seven consecutive days.<sup>50/</sup> Count 4 accused Radiation Technology of violating this regulation in two specific instances: by allowing "(a) radiation levels of 95 mR/h on the surface of a steel container of contaminated resin located outside the door leading into the mechanical room," and "(b) 40 mR/h on the surface of a 55-gallon drum containing contaminated circulation water

49/ "'Unrestricted area' means any area access to which is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials, and any area used for residential quarters." 10 C.F.R. §20.3(14).

50/ 10 C.F.R. §20.105 provides in pertinent part:

Permissible levels of radiation in unrestricted areas.

(a) \* \* \*.

(b) Except as authorized by the Commission pursuant to paragraph (a) of this section, no licensee shall possess, use or transfer licensed material in such a manner as to create in any unrestricted area from radioactive material and other sources of radiation in his possession:

(1) Radiation levels which, if an individual were continuously present in the area, could result in his receiving a dose in excess of two millirems in any one hour, or

(2) Radiation levels which, if an individual were continuously present in the area, could result in his receiving a dose in excess of 100 millirems in any seven consecutive days.

located outside the overhead door leading into the warehouse connected to the office building." 8 NRC at 658.<sup>51/</sup> A \$750 civil penalty was sought for these infractions.

The presiding officer found, however, that the staff inspectors did not prove that they used accurate instruments to measure the radiation levels in question and therefore dismissed the charges. 9 NRC at 663-67, 669. On appeal, the staff acknowledges that this item "rests upon a survey meter whose accuracy has not been established."<sup>52/</sup> Nevertheless, we are urged to reinstate half the proposed penalty on the basis that the licensee "conceded" below that the 55-gallon drum was in an unrestricted area and had a radiation level in excess of 2 mR/h. The staff contends that this was tantamount to an admission of a violation of the regulations and, therefore, that a civil penalty on this item is warranted even without the inspectors' evidence.

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<sup>51/</sup> Count 4 also mentioned instances of excessive radiation "at several locations" not further described. The presiding officer declined to admit evidence relating to those undesignated areas. Tr. 161. The ruling was correct. A licensee is entitled to notice of specific violations before civil penalties may be imposed. 10 C.F.R. §2.205; 5 U.S.C. §554(b)(3). "It is well established, specifically by the [Administrative Procedure Act], by the case law and by the principles of fundamental fairness, that one cannot be found guilty of an offense not encompassed by the complaint or of which he had no fair notice." NLRB v. Tenneco Corp., 339 F.2d 396, 399 (6th Cir. 1964) (per Prettyman, J.).

<sup>52/</sup> Staff Brief in Support of Exceptions at 10.

The "concession" on which the staff relies was a statement by licensee's representative at the opening of the hearing. Dr. Welt there stated that "Radiation Technology agrees that there was one small spot on the 55-gallon drum where the field of the radiation level was in excess of 2mr per hour content (sic)." Tr. 37. His remark, however, was qualified by further comments which appear to us to negate the idea that any violation was being admitted. Ibid. Be that as it may, the staff did not rely on this line of argument at the hearing below. Nor did its proposed findings of fact and conclusions of law urge this rationale upon the presiding officer as a possible ground of decision. Had it done either, the company would have been on notice to offer a satisfactory explanation for what otherwise might be taken as an admission of guilt or face the consequences. By not pressing the point the staff effectively abandoned the "concession" argument (assuming it was ever really raised). This entitled Radiation Technology to assume that the only theory of violation being pursued under charge 4 rested on the metered radiation levels; it defended itself accordingly. In our judgment, considerations of fundamental fairness preclude the staff from resurrecting on appeal a theory it interred at trial. Niagara Mohawk Power Corp. (Nine Mile Point Station, Unit 2), ALAB-264, 1 NRC 347, 355-57 (1975).

Moreover, the staff's failure to present the "concession" argument to the presiding officer is itself cause for not disturbing his decision. Jurisdictional issues to one side, a losing party may not be heard to complain that a tribunal overlooked a legal theory not drawn to its attention. Tennessee Valley Authority (Hartsville Plant, Units 1A, 2A, 1B and 2B), ALAB-463, 7 NRC 341, 347-48 (1978), and authorities cited there. The dismissal of the fourth charge is accordingly affirmed.

3. Failure to Control Licensed Material in Unrestricted Areas  
(Item 5).

The steel container and the 55-gallon drum discussed in the previous section also figure in charge 5 against the licensee. This alleged that Radiation Technology failed to keep these two receptacles of licensed material "under constant surveillance and immediate control" as required by section 20.207 of the Commission's regulations.<sup>53/</sup> As we

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53/ 10 C.F.R. §20.207:

"Storage and control of licensed materials in unrestricted areas.

(a) Licensed materials stored in an unrestricted area shall be secured from unauthorized removal from the place of storage.

(b) Licensed materials in an unrestricted area and not in storage shall be tended under the constant surveillance and immediate control of the licensee."

Charge 5 appears in full in the opinion below, 8 NRC at 659.

understand his opinion, the presiding officer rejected the charge on two grounds: First, because charge 5 was drawn in terms of the "radioactive material in Item 4," he assumed that the staff's failure to prove specific radiation levels in connection with that item vitiated charge 5 as well. (See discussion of Item 4, supra, at p. 31). Second, the presiding officer concluded that the licensee had maintained sufficient control over these receptacles because it could exercise its common law right as a landlord to exclude the public from its property. 8 NRC at 669-70. We agree with the staff that the decision below misconstrues both the regulatory requirements and the evidence on this point.

The regulation in question, 10 C.F.R. §20.207(b), provides that:

Licensed material in an unrestricted area and not in storage shall be tended under the constant surveillance and immediate control of the licensee.

It is not contended that the materials in question were "in storage." The record evidence is undisputed that the two receptacles contained "licensed material"<sup>54/</sup> and were located in an "unrestricted area"<sup>55/</sup> Section 20.207 does

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<sup>54/</sup> "Licensed material" includes "byproduct material received, possessed, used, or transferred under a general or specific license issued by the Commission pursuant to regulations in this chapter." 10 C.F.R. §20.3(8).

<sup>55/</sup> See fn. 49, supra, and Smith, fol. Tr. 107 at 6; McClintock, fol. Tr. 107 at 6a; Tr. 139-40; 237, 239-40.

not make the emission of any particular level of radiation an element of the offense<sup>56/</sup> and the reference in charge 5 of the Notice of Violation to "the radioactive material described in Item 4" does not import such a requirement.<sup>57/</sup> Fairly read, the charge simply refers to the earlier description in order to particularize the receptacles asserted to have been improperly controlled by the company.

The only remaining element is whether the two containers were under licensee's "constant surveillance and immediate control." The trial judge did not apply that standard, however. Instead, treating the material in question as the equivalent of "trash," he held the company's "general control" over its premises as owner or lessee sufficient to satisfy section 20.207. 8 NRC at 670. We cannot agree.

It may well be that the two containers were laden with "trash." But it was radioactive trash. Through its regulations, the Commission, not the presiding officer, decides what kind of precautions licensees must take in handling these substances. And the agency has called for greater controls over the specific material than those attendant

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<sup>56/</sup> Permissible levels of radiation are governed by 10 C.F.R. §20.105. See fn. 50, supra.

<sup>57/</sup> In discussing charge 5, the staff specifically pointed out below that a survey for specific radiation levels "is irrelevant to a determination under section 20.207." Staff Response to Licensee's Proposed Findings at 32.

upon "exclusive occupancy of the building."<sup>58/</sup> In amending section 20.207 to its present form, the Commission stressed unmistakably that the provision directs "that constant control be maintained over all licensed radioactive materials in unrestricted areas."<sup>59/</sup>

We agree with the staff that the licensee did not provide that control for the two receptacles in question. The record does not support the trial judge's finding that both were continuously visible from the plant manager's office (8 NRC at 670). In the first place, according to the manager himself, one of them was not.<sup>60/</sup> In the second, actual and continual observation, not possible and intermittent oversight, is prescribed by section 20.207. Neither the manager

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<sup>58/</sup> 8 NRC at 670. There, in holding a landlord's theoretical common law property rights adequate to satisfy NRC "Standards for Protection Against Radiation" (10 C.F.R. Part 20), the presiding officer commented, "In the glamour of modern technology, there appears to be a tendency to overlook the legal fundamentals, which are followed by the courts and which are most explicitly expressed in the early cases \* \* \*." *Id.* at fn. 7. That may well be so; but these are technological times and these are technological hazards. The existence of an owner's abstract legal right to control his premises does not of itself satisfy the regulatory requirement that he exercise "constant surveillance and immediate control" over radioactive material on those premises.

<sup>59/</sup> 40 Fed. Reg. 266679 (June 25, 1975) (emphasis added). The judge seemingly overlooked this explanation in commenting that, "If something more than general control is needed, the regulation should be amended to state it specifically." 8 NRC at 670.

<sup>60/</sup> Powell, Tr. 313.

nor any other employee was assigned or expected to keep the drum and container with the radioactive waste materials under continuous observation; there is no evidence in the record that anyone actually did so; and the inspectors testified that the two receptacles were neither under constant surveillance and immediate control nor secured against unauthorized removal on the day of their inspections.<sup>61/</sup>

We need not belabor the point. Radiation Technology's representative acknowledged expressly that (Tr. 55):

The company agrees with the NRC in the fact that the items cited in 4(b) was (sic) in an unrestricted area and was (sic) not under constant surveillance and immediate control of the licensee.

The excuse offered -- that the infraction occurred only because of the disruption caused by the inspection itself -- is simply not credible.<sup>62/</sup> In the circumstances, the Director's proposed civil penalty of \$750 on charge 5 is warranted.

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<sup>61/</sup> Powell, Tr. 315; Smith, fol. Tr. 107 at 7; McClintock fol. Tr. 107 at 6.

<sup>62/</sup> For one thing, the receptacles were in place unattended before the inspectors arrived.

V.

Safety regulations and license conditions represent the Commission's judgment of the precautions necessary to protect employees and the public from hazards inherent in the industrial use of radioactive byproduct material. Civil penalties are appropriate to emphasize the importance of strict compliance with those safety precautions, to stimulate the taking of prompt corrective measures, and to deter their future disregard. The record evidences a tendency by this licensee, however, to construe those regulations and conditions as inconveniences that may be ignored rather than as precautions that must be observed. This can lead to harmful exposures to radioactivity; that none has yet occurred is fortuitous. We are fully convinced that civil penalties are called for in the circumstances. And, in light of the company's attitude, we recommend to the Director that the licensee's operations be monitored regularly until it demonstrates an appreciation of the need for compliance with the spirit as well as the letter of these important safeguards.

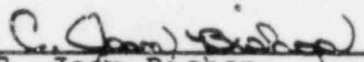
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The presiding officer's rejection of charge 5 is reversed, his resolution of the remaining charges is affirmed,

and civil penalties of \$4,050 against Radiation Technology,  
Inc., are approved.

It is so ORDERED.

FOR THE APPEAL BOARD



C. Jean Bishop  
Secretary to the  
Appeal Board

# Radiation Technology, Inc.

LAKE DENMARK ROAD, ROCKAWAY, N.J. 07866  
(201) 627-2900



cc Allan  
Smith  
McIntock  
Abraham  
Snyder

Cl. &  
11/16

October 18, 1979

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Information Department

Dear Sir:

We hereby request, under the Freedom of Information Act, a listing of all decisions rendered by the Atomic Safety and Licensing Board, which reversed a Nuclear Regulatory Commission staff finding. In particular we are interested in Civil Penalty Appeal reviews, and if in fact the Atomic Safety and Licensing Board did reverse a Civil Penalty, then we would want the names of the parties involved and the decision given by the A.S.L.B. concerning their reason for reversing the N.R.C.

This information is required by our company as quickly as possible, and we look forward to your assistance in this matter.

Very truly yours,

Martin A. Welt, Ph.D.  
President

MAW:fb

cc: Congressman James Courter  
Senator Bill Bradley  
Senator Harrison Williams ✓