

Chapter 1

Introduction

This book is a chronicle of how I got to be a whistleblower and of what happened to me once I opened my mouth. I would like for it to be an uplifting, inspiring story. But unfortunately, although I won my whistleblower retaliation lawsuit and was thus supposedly vindicated, I think my story must instead be taken as a cautionary tale for other potential whistleblowers.

All I ever wanted to be was a senior radiological safety specialist. This was the job I had in November 1989 when I went to work at Oak Ridge National Laboratory (ORNL or "the Lab"), which is a US Department of Energy (DOE) facility in Oak Ridge, Tennessee. I worked there as a health physicist and radiological engineer for 11 years. For most of that time, I, like the rest of the people at ORNL, was an employee of the private company that ran ORNL under contract to DOE, Lockheed Martin. But for the last seven months of that time, my employer was the new ORNL managing contractor, UT-Battelle.

On 28 November 2000, I and 91 other people were told by UT-Battelle managers that we were being laid off as of 1 December 2000, only three days later. Our layoff was declared to be the result of budget constraints. But because of various other indications, many of us did not believe that to be true. In my case, I was sure that it was not true, because I was the most senior person in my group and had good performance ratings. Instead, I believed that I was being laid off because over the preceding year, I had expressed safety concerns to the ORNL Employee Concerns people, then to DOE site representatives, then to a Defense Nuclear Facilities Safety Board representative, and finally to the local DOE office.

I will discuss the details of how all of this happened later in this book. For the moment, the reader should understand that I expressed concerns about ORNL operational management's failing to follow ORNL radiation protection procedures -- especially regarding the requirements for professional and independent review of radiological jobs, operations, and facilities -- and also about the complicity of radiation protection management in these violations.

It is important to note that while ORNL and the other DOE sites are "owned" by DOE, DOE contracts out the management of these sites to various companies rather than running them itself. DOE is supposed to retain oversight responsibilities, including those of ensuring that the site contractors follow DOE safety regulations and good safety practices. Also, DOE is "self-regulating". This means that while DOE is in charge of determining and setting goals for the production and research activities under its aegis, it also sets the safety rules and regulations to be followed and it polices these activities to ensure that the rules and regulations are adhered to. Thus DOE oversees both the production-research activities and the safety and health coverage at its sites. There is a potential conflict between DOE's promotion of production and research and its sometimes work-slowng enforcement of safety- and health-related restrictions.

If a contractor makes an error with a safety impact, whether by negligence or by deliberately ignoring safety procedures, DOE can investigate, withhold part of the contractor's management award fees, and levy fines. But in effect, DOE is fining its own activities. The contractor is supposed to pay fines out of its management fees, whether it is a for-profit entity or a not-for-profit entity (such as a university consortium). But DOE typically holds back from levying fines high enough to discourage a for-profit company or to cripple a not-for-profit consortium.

In my various reports of safety concerns, I pointed out how over the last five years I worked at ORNL, operational management had gutted the independence and integrity of the radiation protection organization by gaining control of the funding that supported rad protection and other safety functions.

Most of ORNL's budget came from DOE as support for running the Lab and for carrying on various DOE-sponsored projects. DOE was supposed to oversee how the funds were spent and to ensure that safety was not subordinated to production or research goals. Thus insofar as the DOE site representatives failed to investigate my concerns or even to sit down with me or receive a written report from me, DOE was derelict in its duty to ensure that safety functions were being supported and performed adequately. My narrative therefore includes, as it must, a discussion not only of how site safety management can go wrong but also how regulators can fail to carry out their responsibilities.

For now, I will point out the important consideration: that when contractor management chooses to place production or research goals above good safety practices -- and a regulator allows them to do it by not looking too closely at their operations and by repeatedly "forgiving" violations -- a safety person is put in a difficult position. On the one hand, he wants to be a good team player and help meet the operational goals; on the other hand he wants to be a true safety professional and to do his job as he was trained was the correct way to do it. This was the position in which I found myself during my last five years at ORNL. The choices I made over those years caused an increasing loss of professional status within the company and eventually cost me my job.

In relating how this all occurred, I hope to persuade the reader of the following points.

1. A well-structured safety organization and a well-defined authoritative relationship to the operating and research groups it serves are essential for effective safety coverage. In particular, inappropriate use of the "customer service" concept is corrosive to good safety coverage.
2. Undue authority over safety decisions by operational and research groups undermines adequate safety coverage due to the inherent conflict of interest; self-assessment and self-policing by a site are limited in what they can accomplish because of the inherent conflict of interest.
3. Fractionating safety coverage by segmenting work and farming it out to subcontractors, each of which is allowed to have its own self-determined safety program and personnel, undercuts coherence of safety coverage and makes oversight by contractors and DOE more difficult.
4. DOE has been an ineffective and lax regulator and thus has not adequately provided for the safety and protection of workers and the public.
5. DOE has allowed contractors to use the power of the large budgets and fees they control to influence local and state officials and other community leaders and also to promote private business ventures.

DOE and Its Attitude Toward Safety

How DOE got to be DOE is a story in itself. The activities associated with the development and production of the atomic bomb were first undertaken during World War II. The whole project was so large and complex that it was set up as a separate agency managed mainly by the Army, called the Manhattan Engineer District (MED). In 1947, MED became a civilian agency called the Atomic Energy Commission (AEC). In the later postwar era, when utilities were building nuclear power plants, objections were made to the self-regulating structure of AEC: on the one hand it advocated and sponsored nuclear activities and on the other hand it regulated and oversaw these activities. This was seen as a significant conflict of interest. Consequently, in 1974 AEC was split into the Nuclear Regulatory Commission (NRC) and the Energy Research and Development Administration (ERDA). NRC was and is pretty much an entirely regulatory agency that covers nuclear power plants, medical X-ray units, medical use of radionuclides, radiography, and like activities. ERDA was given what today are DOE's facilities and was, again, a self-regulating agency; for some reason, the conflict of interest seen with respect to,

e.g., power plants was not taken to apply to ERDA sites, or at least Congress felt that other considerations, such as the need for secrecy at ERDA weapons production sites, were more important.

However, there was another significant difference between NRC and ERDA. When AEC split, it was seen that some extra bureaucrats would be needed to man both the agencies. Most of the best AEC people, managerially and technically speaking, were going to NRC. So other federal agencies were solicited to give up people they could spare to staff up ERDA. I once read in TIME magazine that the other agencies gave ERDA their deadwood and that ERDA thus had the (deserved) reputation of being a haven for hacks. This would help explain why DOE is universally regarded as one of the most politicized of all federal agencies. By "politicized", I mean that it often seems to take a decision not on the basis of the technical merits of the case, but on the way the political wind is blowing, or even on the apparent whim of some bureaucrat. I will give examples of this later, but suffice it to say here that the often arbitrary nature of DOE regulation has for many years been a frustration to contractors across the DOE "complex" (which is all DOE sites collectively). It can be a motive (although of course not an excuse) for evasiveness and cover-ups on the part of contractors.

Many also think that DOE is one of the most ineffective agencies. Shortly after I went to work at ORNL, after working for 13 years in the NRC world, I met a person who had also worked in the NRC world for years and had now been in the DOE world for several years. He remarked to me that whatever I thought of NRC people -- if I thought that they seemed arbitrary, finicky, etc. -- I would now think that they were a bunch of utterly sane and rational people compared to the DOE people. He was so right. While I have known and admired several excellent DOE people (who are certainly worthy of the name "public servant"), I have found many of the rest to be unengaged intellectually in what they were doing, excessively concerned with what will "fly" with DOE higher-ups, and most of all, unprepared (and even unqualified) for overseeing the work they were assigned to.

During my time at ORNL, many of the DOE field representatives seemed to spend little time in the field or in project or facility meetings and they seemed to take only a desultory interest in their assigned areas, so it was hard to understand how they could be on top of what was going on. Some of the DOE field reps were supposed to oversee both operational and safety activities of particular projects or facilities, which would seem to be a conflict of interest, and they didn't seem to have much contact with the DOE sitewide safety-specific reps. The DOE site safety reps at ORNL seemed to be unfamiliar with the details of the ORNL rad protection manual or actual ORNL rad protection practices. One difficulty of oversight is that if an oversight person does not know what he is supposed to look for, does not try to look for it, or is prevented from looking for it (e.g., by being lied to or misled), then he does not see the problems until an incident occurs. This seems to be how DOE, in so many cases, "uncovers" a safety problem: only when something adverse happens. From a safety specialist's point of view, this is no way to run a railroad.

DOE's stated policy is that safety is the first priority in doing DOE work, but in fact DOE's actions do not always support this policy. Most often, DOE seems to countenance the view of some contractors that while safety is a necessary function, it is only supplementary to the central function, i.e., production or research. DOE does this in several ways. (I will be using mostly radiological protection examples in this book, but analogous statements can, I believe, be made about other safety areas.) I hope the reader will bear with me as I discuss DOE's orders and rules below, because it is important to understand the nature of these in order to understand how DOE comes up short in safety.

First, over the period that I worked at ORNL (1989-2000), DOE made radiological protection requirements first more rigorous and specific and then much less so. When I first went to work at ORNL in November 1989, DOE had just promulgated its Order 5480.11, "Occupational Radiation Protection". This was regarded as a sea change in DOE regulation because, spare as it was, it marked a more detailed specification of rad protection requirements than had been made previously. (For once DOE beat NRC:

NRC world folks will recognize that the analogous 10 CFR 20 revision did not take effect until some time later.) In 1992, at the urging of an advisory group, DOE issued the DOE Radiological Control Manual ("the Rad Con Manual"), which gave even more specific and detailed requirements for occupational radiological activities. The stated intent was to make radiological activities, especially rad work planning, more consistent across the DOE complex, with an implied baseline level of performance.

The Rad Con Manual had its problems, but it turned out in the long run to be a progressive and (as they say) culture-changing document. However, in December 1993, DOE issued 10 CFR 835, "Occupational Radiation Protection", and made the Rad Con Manual a "nonmandatory technical standard"; that is, in the prefatory remarks in 10 CFR 835, it stated that the Rad Con Manual was "not regulatory in nature" and was "intended to provide detailed guidance on best practices". 10 CFR 835 was a rule (i.e., a law) instead of just an agency "order", but because it was a much more spartan document than the Rad Con Manual, it represented a step backward in terms of specific requirements. However, DOE sought to cover this gap by including as one of the 10 CFR 835 requirements the submission of a radiological protection program (RPP) plan to DOE by each contractor. In this plan, the contractor was supposed to spell out how each of the 10 CFR 835 requirements would be met. DOE stated orally and implied in an 835 implementation guidance document that it expected that additional site-specific requirements would need to be added by each contractor in order to meet the general 10 CFR 835 requirements. The site-specific requirements committed to as part of the RPP plan would have the force of law just as the requirements contained in 10 CFR 835 would. Later, DOE said expressly in Interim Notice DOE N 441.1 (September 1996) that 10 CFR 835 did not address all areas needed to form the basis of a comprehensive rad protection program, so DOE N 441.1 added more requirements.

DOE N 441.1 also stated that 10 CFR 835, DOE N 441.1, and 835's associated guidance documents together formed the basis for such a comprehensive rad protection program. In revised 835 implementation guidance issued in March 1999 ("Management and Administration of Radiation Protection Programs", DOE G 441.1-1 (initially G-10 CFR 835/B1)), DOE stated that "the RPP should rely on existing documents, such as the site radiological control manual, contractual agreements, procedures, and memoranda, to effectively administer and manage regulatory commitments.... Additional documentation should be developed and maintained to supplement the approved RPP to demonstrate that an RPP can be effectively managed and administered to achieve compliance with 10 CFR 835. This documentation typically includes a site radiological control manual developed to the guidance contained in the [DOE Rad Con Manual], as well as detailed implementing procedures, appropriate management policy statements, and technical basis documentation. While this documentation need not be part of the RPP, it should be clearly linked to the compliance commitments contained in the RPP." That is, DOE said that although one might not put the site Rad Con Manual, the memoranda, technical bases, etc., literally in the RPP, it was necessary for a site to keep these on file to bolster its assertion to DOE that its RPP was adequate in terms of both requirements for compliance and execution of its plans and procedures so as to produce compliance. DOE also said that the site, and presumably DOE too, should audit the rad protection program, including the supplementary documentation.

It is important to understand that the documentation backing up the RPP, although it might not be in the RPP, clearly formed part of the basis for evaluating compliance by a site. This was true not only for 10 CFR 835, but also for the much-discussed and, I believe, contractor-opposed new rule 10 CFR 830, "Nuclear Safety Management" (aka "the Quality rule"). This was issued in interim form in October 2000 and dealt with establishing and maintaining quality and safety processes. Specifically, it stated that failures to follow safety procedures could be violations of the rule.

DOE's backing off from having specific rad protection requirements was an effort to meet the contractors' declared need for flexibility of regulation. Rather than "one size fits all" requirements, now they could have "my [site's] size" requirements. Given the diversity of activities and of hazards at DOE sites, this

was a commendable move toward what one might term practical or real-world regulation. But it had a potential weakness: because it allowed the contractors to select their own methods of meeting the given 10 CFR 835 requirements and their own additional requirements, it opened the possibility of the contractor's adopting a minimalist or sub-adequate level of requirements.

This would not be a problem if DOE was on the ball since DOE had to approve each RPP plan and thus each contractor's methods and additional requirements. But the scrutiny that DOE gave a plan and the associated documentation was not necessarily rigorous or close and certainly was not necessarily informed by a knowledge of the implications for specific operations at the sites. DOE-Washington gave the written approval, but it is unlikely that the Washington people read every word of every procedure and considered how the procedures would be carried out in practice. It was even more unlikely that they knew enough about a particular site's operations to appreciate what was missing or inadequate. The local DOE office was also supposed to review the plan, but how well they would do so was in question; as I noted above with regard to DOE field people, at least at ORNL, unfamiliarity with actual rad protection practices (i.e., what is actually done, as opposed to what "the paper" says is supposed to be done) can render such a review ineffective. So the result of DOE's approval of a mostly contractor-generated set of methods of meeting a limited number of set requirements -- and DOE's approval of an entirely contractor-generated set of additional requirements -- was that nearly all requirements and the way they are met were negotiable, while the DOE review of the adequacy of these requirements was often faulty. Thus the first way that DOE's actions fail to support its stated safety policy is that its level of regulation has effectively receded.

A second way that DOE does not support its own policy is in the use of what DOE terms "the graded approach" to planning rad work and formulating job-specific requirements. This too is a practical or real-world regulatory approach, with the same potential weakness. In using the graded approach, there has to be a determination made as to the level of hazard or risk involved in a proposed job or operation. Once that determination has been made, then the requirements associated with that level kick in and the appropriate controls -- i.e., the protective or mitigative measures -- are applied. The trouble with the graded approach comes in the determination of the hazard or risk level and in the application of requirements. If the determination is done by a formal process -- e.g., by a trained, knowledgeable person using a detailed standard checklist prepared in advance -- then consistency and adequacy of the choice of requirements and controls can be assured. But if the determination is done on an informal basis -- say by an inexperienced or inattentive person using a nonspecific checklist or even just "eyeballing" the job -- then the choice of requirements and controls can be subjective and may be manipulated. This is especially true if an operational person rather than a safety person is making the determination: even if the choice has to be reviewed and signed off on by a safety person, the safety person's reviewing only the checklist or the conclusions memo, rather than visiting the site and reviewing the original basis documents, can result in an uninformed approval. Similarly, if the appropriate safety requirements and controls for each given risk level have been selected in advance, with exceptions allowed only by formal documentation, then consistency and adequacy are assured; if they are selected on an ad hoc or case-by-case basis, then there is typically a lot of variability from job to job and project to project and the choice is readily manipulated by interested parties. Thus DOE does not support its safety policy in that it allows for excessively flexible application of the paper requirements and by allowing for production of requirements on a case-by-case basis to an excessive degree.

A third way that DOE fails to support its safety policy is in the safety management approach that it required contractors to use from about 1996 on. This approach is so central an issue in DOE's policy failure that I devote most of a chapter to it and so will not go into detail about it here. I note, however, that DOE pursues and imposes on its contractors one management and business fad after another (on top of those that the corporate managements of contractor organizations pursue on their own). Some of these are appropriate for, e.g., a cafe or a widget factory but not for a safety organization. DOE's politicization is

nowhere shown more clearly, I think, than in the zigging and zagging that it has done as it searches for the Holy Grail of Safety, i.e., zero incidents at zero additional cost. Of course, every time the contractors have to adopt a whole new safety management system, there is an additional cost for the changeover even when there is no subsequent improvement in safety performance. There may even be a degradation of safety performance because things are likely to "fall through the cracks" due to confusion during the changeover.

A fourth way that DOE fails to support its safety policy is by allowing a great deal of self-auditing and self-assessment. It may seem fairly shocking in the wake of the Enron scandal that this is so, but it seems to be one of DOE's blind spots. DOE's rationale is that the contractor should be reviewing its own activities. Certainly, self-auditing and self-assessment have always been a good idea from both a safety and an operational point of view because they help the contractor to find problems and ways to improve. They also help in getting the problems fixed before DOE finds them itself; DOE expects that the problems will be reported anyway, but every good regulator would prefer that the contractor ferret out a problem promptly and have it fixed, or well on the way to being fixed, by the time the report is in. But the difference today is that DOE seems to be doing less auditing and assessing in favor of having the contractor do a self-audit and submit the report to DOE, thus ceding a great deal of oversight time and effort to the contractor. There are also safety performance indicators that the contractor and DOE are supposed to come up with together, but these often are subject to manipulation and underreporting and are sometimes not representative of truly significant factors. The weakness of the "let the contractor do his own" approach should be obvious to all: it saves DOE itself time and money, but allows for a lot of nonreporting and covering up of problems and for "spinning" the problems that are reported.

As can be seen from the enumeration of the points above, the degree of oversight provided by DOE -- in promulgating and approving the requirements by which contractors must operate and in verifying that they are following the requirements -- is important in determining how effectively workers and the public are protected during the contractor's activities. It is understandable, although of course not excusable, that a contractor would push the limits of regulation in order to save time and money, but it is not understandable why DOE would allow them to do so. Yet, as I will explain in future chapters, this seems to be what DOE has allowed ORNL's contractors, and possibly other contractors, to do.

The Role of Money

DOE's motivation seems to be largely a desire on DOE's part to do work more cheaply and thus get Congress off its back. Various studies of DOE's activities (e.g., the one reported on in 2000 by the General Accounting Office of cleanup operations around the DOE complex) have concluded that DOE wastes a lot of money in conducting its activities; several Congressmen seem to have made a point of holding DOE's feet to the fire about this waste. The pressure to save money flows down from DOE to the contractors. Many contractors view safety coverage as an area where significant cuts can potentially be made because safety is considered "nonproductive work" and thus can be cut back in the interests of achieving operational goals ("productive work"). DOE is very reluctant to admit that money is such a crucial driver in safety coverage decisions, but in recent years, as the budget belts are pulled ever tighter and something has to give, it has often been safety coverage that has suffered most. DOE admits that it has gone to more flexible regulation and has allowed its contractors to shrink their safety organizations and to hire temporary or subcontracted safety help if they choose, but DOE insists that this has not resulted in a decrease in safety effectiveness; the contractors, insists DOE, are "working smarter and cheaper".

A second consideration is the local DOE office attitude versus the DOE headquarters (Washington) attitude. One informal explanation that I and others have been given by DOE and others about DOE's attitude is that DOE "doesn't see a problem" (regarding safety issues). But this raises the question of why they don't see a problem with the issues we have raised, such as the outright violations of rad protection

procedures and of 10 CFR 835 and 10 CFR 830 that I will be discussing. If the requirements of the procedures and of the CFRs are indeed necessary, as DOE's approval of the RPP plan and its promulgation of the CFRs would seem to indicate, then why are violations not taken seriously? I believe that much of the answer lies in the power of the local (regional) DOE offices to control what goes on in their bailiwicks. Some of these offices are notably less strict than others. DOE's Oak Ridge area office (DOE-ORO) has the reputation of being more lax and more "in bed with" its contractors than other DOE regional offices. There are some documented indications of this that I will go into later, but for now suffice it to say that details of the issues I raised were communicated by me to DOE-ORO field representatives and to DOE-ORO central safety representatives well before my formal whistleblower report made it to the Washington DOE offices. DOE-ORO, then as now, let ORNL off the hook as far as correcting its safety deficiencies.

Especially of concern is the fact that DOE-ORO generally takes the contractor's word regarding its actions, without checking adequately whether said actions were done at all, were done for the reasons given, or were done in the manner described. I suppose that these DOE regulators may sincerely believe that they are doing adequate checks, but all too often their reviews are superficial and uninformed, as I will illustrate. Over the years, several DOE people have remarked to me that they wished that they were allowed to do more, especially in the field, and that they think they should be doing more. Thus I believe that many DOE people are aware that their oversight practices are unwisely limited in scope and in depth. I reiterate that I have met some very capable DOE people; I have wondered what life at the sites would be like if they were not hobbled in their oversight efforts.

The contractors frequently toot their own horns regarding their health and safety practices. However, as everybody knows, you can't always believe advertising. One way of seeing how they are doing is to read the Preliminary Notices of Violation (PNOVs), which are essentially letters that DOE sends to contractors when it proposes to fine them under the Price-Anderson Act and Amendments (P-AAA) for violations of DOE safety rules. For DOE rad protection, P-AAA is applied via 10 CFR 835 and 10 CFR 830. In each PNOV is a DOE-authored description of how the adverse incident(s) occurred and why. The PNOVs are not the whole story, however, since although the contractors report the incidents directly to Washington, the detailed report to Washington has usually (at least in Oak Ridge's case) been vetted first by the local DOE office. Also, except for really big incidents, any DOE investigation on site is done by the local DOE office. Thus there is a potential for complicity of the local office in putting the right "spin" on incidents, or in investigating them in minimalist fashion, in order to avoid or reduce fines. One of the points that I hope to make in this book is that at ORNL, many radiological violations went unreported by the contractor and DOE-ORO either was unaware of them due to oversight failures or ignored the implications when the violations were pointed out. As a result, one can see clearly from the PNOVs that, e.g., DOE's Hanford (Washington State) site was cited for the same type of violations that ORNL was allowed to get away with.

Why would a contractor give safety short shrift and cover up violations and incidents? The simple answer, of course, is money. But it is a more complicated issue than just how much money is spent on safety. Often, skimping on safety is not a matter of an entire site's budget, as the contractors like to imply, but of individual projects' or facilities' budgets. Arguably, it is also often a matter of individual managers' bonuses: they are usually rewarded or punished for reaching or not reaching production or research goals and milestones but seldom rewarded or punished in any meaningful way for reaching or not reaching safety goals. So on an individual project or facility basis, past a certain minimum level, safety can be regarded as overkill -- even, from a budget point of view, as a waste of precious financial resources.

What short-sighted people fail to realize is that what is good for a project, facility, or individual set of managers is not necessarily good for the site or contractor as a whole. A messy contamination, for example, is not only costly for the site, since investigation and cleanup funds may come out of a sitewide

pot, but also can give the whole site a black eye. The PNOVs cite the contractor and site as responsible (not individual project or facility managers, who are not named in the PNOV) and it is the contractor that is fined. This is why I find credible that at one point the exasperated corporate parent of Lockheed Martin (the ORNL managing contractor up to April 2000) made the top ORNL managers pay a certain DOE fine out of their bonuses – not just the manager of the division whose operations occasioned the fine, but also the various associate directors and the ORNL director himself.

I imagine that those top managers were pretty upset at the division and facility people whose actions resulted in the fine. Still, the prospect of having to pay the fine out of one's bonus produces two conflicting incentives, based on the potential not only for professional embarrassment but also for personal financial loss. The first is to do right and not screw up, but the second is to cover up any screwups. The 2002 Enron scandal (in which the disclosures of whistleblower Sherron Watson featured prominently) showed what happens when the relatively short-term interests of a group or even an individual are allowed to take precedence over the long-term interests of the entire company and its shareholders. I believe that DOE has not adequately considered what you might call the micro financial motives in its safety regulation of entire sites.

Another phenomenon that has financial implications is the fractionation of safety coverage by divvying work up among subcontractors, which I call the balkanization of work. Sometimes it is necessary for DOE or a managing contractor to farm out site work to an entity other than the managing contractor because of the specialty nature of the work, the need for short-term additional manpower, etc. However, DOE's emphasis on diversity goals and on parceling out work apparently just for the sake of "spreading the wealth" makes for additional, significant difficulties in oversight by the managing contractor and by DOE itself, especially when each subcontractor has its own self-determined safety program and personnel. Besides the "diversity/keep local small businesses happy" aspects, one reason that DOE frequently offers as a reason for parceling out work is that giving specific projects to the lowest bidder saves money. However, it is hard to see how money is saved if oversight has to be maintained over so many different entities, if the managing contractor is providing dosimetry and related services anyway, and if there have to be interfaces maintained between the managing contractor and the subcontractor.

Safety Culture

DOE and its contractors talk a lot about "safety culture". In a good safety culture, people follow rules, have a good attitude toward safety, and have a "questioning attitude" in any individual situation; in a bad safety culture, people break the rules, regard safety as a side issue, and have an "anything goes because we can handle it" attitude. DOE is always urging contractors to improve their safety culture. But as I will explain later, DOE's own safety culture needs improving as well. The impetus for improvement comes from Congress, the States, and workers and the public as a result of the various revelations of leaking radwaste drums, unmeasured airborne releases, etc. The "old ways" -- of having operational considerations nearly always trump all other considerations, of having procedures being regarded as desirable to have to show regulators but optional in practice, of having safety planning regarded as annoying busywork, and of having wariness about being exposed to a hazard (such as receiving dose) viewed as akin to superstition -- were supposed to have been abandoned once and for all in the reform days of about 1989-1992. The contractors did indeed make great strides during that time, but a lot of backsliding has occurred, especially where the tightness of budgets can be invoked. Again, DOE has allowed this occur, either by ignoring the sometimes painfully obvious or by being ignorant of what is going on. Thus it is questionable whether DOE, although it "talks the talk", is "walking the walk" in promoting and maintaining a positive safety culture among its contractors.

The Influence Factor

A collateral point that I will make later involves what you might call the influence factor: contractors can use the money that DOE gives them, both as program budgets and management fees, to influence local

and state officials and other community leaders, who in turn put pressure on DOE in favor of the contractors. DOE has brought this on itself partly by requiring (financial) community involvement, even to the point of having requirements or goals for this, and partly by promoting the reputations of such contractors to the point where DOE would be highly embarrassed by being candid or forceful about any lapses by the contractors. DOE thus is liable -- and I believe has been guilty of -- soft-pedaling safety enforcement for such contractors as a result of this influence. Another aspect of the influence is that leverage by the contractors to use DOE-funded or -sponsored research in the promotion of private business activity has increased significantly. Although my discussion of this influence will undoubtedly prove controversial, I urge readers to stay focussed on my main points even if they hold contrary views on the influence question.

Summary of the Purpose of This Book

In this book I hope to show how the following can all create deformations in proper safety coverage.

1. Incorrect structuring of safety organizations and imbalances in their relationships with operating and research organizations
2. Conflicts of interest inherent in giving operational and research groups undue authority over safety decisions and in giving sites wide latitude to self-assess and self-police
3. Fractionation of safety coverage by divvying work up among subcontractors, each of which has its own self-determined safety program and personnel
4. DOE's ineffective and lax regulation
5. The power of money to buy influence and promote private ventures

Although exposing those who discriminated against me and who lied about their activities has a certain appeal, my main motivation is to record what happened and thus to influence change in the future. I want to create a written document for interested folks to refer to in order to understand how such things can come to pass; I want to persuade other safety professionals of the validity of my views; and I hope to persuade DOE to abandon its ineffective and bankrupt policies. If these constructive results come to pass, I will be amply rewarded for all my efforts.

In that spirit, I am not going to seek to publish this book in paper form (unless some publisher volunteers!), but am going to post it on the Web where anybody in the world can access it and print it out for himself. I ask only that the copyright be respected and that proper credit be given to me as author when the book is printed out and when it is quoted.

In that spirit also, I have named names where it was appropriate. One reason is to make it easier for the reader to keep track of the "actors"; it can be confusing to keep straight who was who when two different people held a position over a period discussed. Second, in the pdf version of the book it will be easier to track references to frequently mentioned folks if it is possible to search by name. Third, there is accountability: if people think that their actions may be publicized, they may be more apt to think about what they are doing in the future. Fourth, several people who really stuck their necks out for me deserve recognition and so where their acts were already known to UT-Battelle or DOE, I felt that I could identify them. Thus I have generally used the names of all those who figured prominently in what I relate.

Because, again, I would not want to expose low-ranking people to retribution and because it serves no purpose to name minor actors who appear only once or twice in a narrative, I have not named certain people that I wanted to protect (such as some rad protection technicians whom I would otherwise be

pleased to praise by name) and certain other people whose actions were notable in a negative way but not crucial. As a result, as the reader will see, I have not named some low-level people who were blatantly nasty to me, such as the one who forged my name to an E-mail message.

I have tried to be careful to make clear how I learned certain information: what things I knew of my own personal knowledge, what was told to me by credible sources, and what was just rumor and could not be verified. I have generally tried to relate "just the facts", but in some cases I have not only described the actions of some people but have characterized them as well. For example, I might say that one person was a yes-man and another had round heels, as a way of illustrating my opinion that they were chronically and habitually deferential or yielding. Such personal characterizations might seem gratuitous, but I felt I needed to make them to show how personalities matter; how certain personalities worked out, for good or ill, in critical positions; and especially, how having an agreeable personality was favored over having high qualifications.

The reader should note that I have a great deal of documentation of what I state in this book. Although I have not given a list of these in the book even where I quoted directly from them, I assure the reader that I have many reports, memos, procedures, and other formal documents to back up my contentions. This includes extensive written documentation of oral events: I typically took copious notes of meetings and I made notes of nearly all but the most routine phone calls and business conversations. I did not do this in anticipation of needing to use the documentation some day, but as a routine practice all my business life, as anybody who knows me will tell you. Thus when I state that "we were told such and such", I nearly always have a written contemporaneous note of what was said. I thus did not have to rely on my memory alone in most cases, but could consult notes made when an oral event was fresh in my mind.

With all that said, I stress that I welcome any factual corrections or any explanations that might cause me to revise my thinking or my understanding of the various events or situations. Please direct any such corrections or explanations to me at janet.westbrook@comcast.net.