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Whistleblower and Liability Protections for Scientific Laboratory Employees

Jarod S. Gonzalez and Victoria Sutton

Abstract

The American whistleblower protection scheme as applied to whistleblowers in the laboratory context is a complex patchwork of federal, state, and local laws. Substantial differences in whistleblower protection for laboratory employee whistleblowers depend on a number of factors, including whether the laboratory employee whistleblowers work for public or private institutions and the location of the whistleblower. This document provides a basic summary of the American whistleblower protection scheme applicable to workers employed in laboratories in the United States, with a focus on biological laboratories, and those working with select agents, which are highly infectious agents that warrant special regulations for public safety and national security reasons.

KEYWORDS: employment law, whistleblower protection, laboratory regulations

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I. INTRODUCTION

Approximately 500,000 workers are employed in laboratories throughout the United States.¹ The laboratory environment can be a dangerous place for workers. The potential hazards laboratory workers face on a day-to-day basis include, but are not limited to, chemical, biological, physical, and radioactive hazards.² Recent high-profile on-the-job fatalities to laboratory workers highlight this ever-present danger. In September 2009, a University of Chicago genetics and cell biology professor died from *Yersinia pestis* infection.³ According to a report for the Centers for Disease Control and Prevention (CDC), the researcher became infected with bacteria that cause plague while performing research in a university laboratory setting.⁴ In December 2008, a research assistant employed by the University of California at Los Angeles was hospitalized and later passed away from burn injuries suffered while the assistant was working with a pyrophoric chemical in a university laboratory.⁵ In May 2009, Cal/OSHA, the state agency responsible for investigating workplace safety and health violations in California, fined UCLA \$31,875 after determining the laboratory assistant had not been properly trained and was not wearing protective clothing.⁶

In 2001, an incident occurred involving the mailing of letters containing anthrax. The Federal Bureau of Investigation (FBI) determined that Bruce Ivins, a career research scientist at the United States Army Medical Research Institute of Infectious Diseases (USAMRIID) laboratory, was the person most likely to have mailed the anthrax letters. His suicide, before any arrest was made, ended the investigation. However, the FBI closed the case in July 2010 and concluded that they believed Ivins was the perpetrator.⁷ As a result, the National Science Advisory Board for Biosecurity (NSABB) was tasked with exploring means for

¹ OCCUPATIONAL SAFETY & HEALTH ADMIN., OSHA 3404-11R, LABORATORY SAFETY GUIDANCE 4 (2011) [hereinafter OSHA Guidance], available at <http://www.osha.gov/Publications/laboratory/OSHA3404laboratory-safety-guidance.pdf>.

² *Id.*

³ Ctrs. for Disease Control and Prevention, *Fatal Laboratory-Acquired Infection with an Attenuated Yersinia pestis Strain – Chicago, Illinois 2009*, 60 MORBIDITY & MORTALITY WKLY RPT. 201, 201 (Feb. 25, 2009), available at <http://www.cdc.gov/mmwr/pdf/wk/mm6007.pdf>.

⁴ *See id.* at 201-05.

⁵ Kim Christensen, *State Fines UCLA in Fatal Lab Fire*, L.A. TIMES, May 5, 2009, <http://articles.latimes.com/2009/may/05/local/me-uclalab5>.

⁶ *See id.*

⁷ *Justice Department and FBI Announce Formal Conclusion of Investigation into 2001 Anthrax Attacks*, U.S. Dep't of Justice (Feb. 19, 2010), <http://www.justice.gov/opa/pr/2010/February/10-nsd-166.html>. “As disclosed previously, the Amerithrax investigation found that the late Dr. Bruce Ivins acted alone in planning and executing these attacks.” *Id.*

addressing what became known as the “insider threat.”⁸ The agency responded with “specific strategies and guidance for assisting the scientific community in establishing and implementing practices that promote a culture of responsibility with respect to biosecurity.”⁹ In May 2009, the NSABB produced a report on personnel reliability.¹⁰

In 2005, the Occupational Safety and Health Administration (OSHA) proposed fines against Boston University for the accidental infection of a worker with tularemia, when the ordered bacteria, delivered from the supplier, was inadvertently the infectious strain of tularemia, not the attenuated strain, leading to several infections that were not immediately discovered.¹¹ In 2007, Texas A&M University was investigated and penalized by the CDC for the accidental infection of an employee who was infected with brucellosis during the course of cleaning equipment after an experiment.¹² OSHA did not have jurisdiction over state facilities in Texas, whereas in the Boston University case, OSHA could levy fines against the laboratory.¹³ Both incidents involved similar laboratories with similar work, yet a very different regulatory scheme applied to the two incidents because Occupational Safety and Health Act-style regulations applied in Massachusetts but not in Texas.¹⁴

Federal, state, and local laws attempt to regulate the laboratory working environment to maintain the safety and health of employees and other participants in laboratory activities. At the same time, federal, state, and local laws also provide some degree of protection to employees who complain about laboratory health and safety violations to either the government or their employer. The legal protection typically concerns making it illegal for employers to take any adverse employment action against laboratory workers who complain about laboratory safety issues, if the complaint constitutes protected conduct. For example, in one

⁸ See NAT’L SCI. ADVISORY BD. FOR BIOSAFETY, GUIDANCE FOR ENHANCING PERSONNEL RELIABILITY AND STRENGTHENING THE CULTURE OF RESPONSIBILITY 1-3 (2011), *available at* http://oba.od.nih.gov/biosecurity/pdf/CRWG_Report_final.pdf.

⁹ *Id.* at 7.

¹⁰ See generally NAT’L SCI. ADVISORY BD. FOR BIOSAFETY, ENHANCING PERSONNEL RELIABILITY AMONG INDIVIDUALS WITH ACCESS TO SELECT AGENTS (2009), *available at* <http://oba.od.nih.gov/biosecurity/meetings/200905T/NSABB%20Final%20Report%20on%20PR%205-29-09.pdf>.

¹¹ See *OSHA Completes Investigation and Issues Citations and Letter of Significant Findings and Recommendations in Boston University Biosafety Lab Case*, OSHA REGIONAL NEWS RELEASE (May 9, 2005), http://www.osha.gov/pls/oshaweb/owadis.show_document?p_table=NEWS_RELEASES&p_id=11351.

¹² See *Texas A&M University Violates Federal Law in Biodefense Lab Infection*, THE SUNSHINE PROJECT (Apr. 12, 2007), <http://www.sunshine-project.org/publications/pr/pr120407.html>.

¹³ See *infra* Part II for an explanation of the applicability of OSHA regulation in certain states.

¹⁴ See *id.*

of the most recent high-profile laboratory whistleblower cases, a federal jury awarded approximately \$1.4 million in damages to a former Pfizer molecular biologist who complained to her employer about an odor in her laboratory and the placement of desks near laboratory benches where scientific experiments were performed.¹⁵ The jury found that the company violated Connecticut free speech and whistleblower laws because it terminated the biologist's employment for complaining about the laboratory safety conditions.¹⁶ In June 2011, the federal district court upheld the jury's verdict in the case and added a punitive damages award to the plaintiff's recovery.¹⁷

The *Pfizer* case is only the tip of the iceberg regarding laboratory safety and whistleblowing. Commentators, even government officials, have strongly questioned whether federal standards regarding biotechnology safety do enough to protect vulnerable laboratory workers.¹⁸ Moreover, whistleblower laws are usually not targeted at addressing the needs of workers in the potentially dangerous environment of a laboratory, but are addressed to broader categories of workers. Consequently, laboratory employees, like many types of employees, may be under-protected if they report alleged safety and health violations. Nonetheless, whistleblower laws may cover certain laboratory employees, and it is prudent for laboratory workers to have a basic understanding of the whistleblowers laws that may apply to them.

The American whistleblower protection scheme as applied to whistleblowers in the laboratory context is a complex patchwork of federal, state, and local laws. Substantial differences in whistleblower protection for laboratory employee whistleblowers depend on a number of factors, including whether the laboratory employee whistleblowers work for public or private institutions and the location of the whistleblower. This document provides a basic summary of the American whistleblower protection scheme applicable to workers employed at laboratories in the United States, with a focus on biological laboratories and those working with select agents, which are highly infectious agents warranting special regulations for public safety and national security reasons.

¹⁵ See Andrew Pollack & Duff Wilson, *A Pfizer Whistle-Blower Is Awarded 1.4 Million*, N.Y. TIMES, April 3, 2010, at B3, available at <http://www.nytimes.com/2010/04/03/business/03pfizer.html>.

¹⁶ See *McClain v. Pfizer, Inc.*, 2011 U.S. Dist. LEXIS 68415, *2 (D. Conn. June 27, 2011).

¹⁷ *Id.* at *2 - *9.

¹⁸ See Andrew Pollack & Duff Wilson, *A Higher Bar for Pathogens, But Adherence Is an Issue*, N.Y. TIMES, May 28, 2010, at B6, available at <http://www.nytimes.com/2010/05/28/business/28hazardside.html>.

II. LABORATORY WORKPLACE HEALTH & SAFETY LAWS & REGULATIONS

The Occupational Safety & Health Act

Laboratory safety is regulated primarily under the federal Occupational Safety and Health Act (OSH Act).¹⁹ The OSH Act covers most private employers, although certain categories of work are regulated by other agencies.²⁰ State and local government employers are exempted from coverage under the OSH Act.²¹ However, many state employers end up being covered by workplace safety and health regulations as part of a process in which OSHA may approve a state's creation of a state occupational safety and health plan.²² Some states have created OSHA-approved state plans that cover both private-sector and public-sector employers.²³ Some state-approved plans cover only public-sector (state and local government) employers and do not cover private employers.²⁴ Some states that do not have any OSHA-approved workplace safety and health plan still voluntarily provide some level of workplace health and safety coverage to public employees.²⁵ Furthermore, the OSH Act's federal occupational safety and health programs generally cover federal employers.²⁶ The upshot is that most commercial, government, and academic laboratories are covered by the OSH Act or OSH Act-style regulation. But due to the complex system of federal OSH Act

¹⁹ See generally Occupational Safety and Health Act of 1970, Pub. L. No. 91-596, 84 Stat. 1590 (1970) (codified as amended at 29 U.S.C. §§ 651-679).

²⁰ The best example of this point is mine workers. The health and safety conditions of mine workers are regulated by the Mine Safety & Health Administration. See Federal Coal Mine Health and Safety Act of 1969, Pub. L. No. 91-173, 83 Stat. 742 (1969) (codified at 30 U.S.C. § 801 (1976)) (amended 1977).

²¹ 29 U.S.C. § 652(5) (2010). "The term 'employer' means a person engaged in a business affecting commerce who has employees, but does not include the United States or any State or political subdivision of a State." *Id.*

²² § 651(b)(11).

²³ Currently, twenty-two states have state plans that cover private-sector and public sector (state and local government) employment. These states are Alaska, Arizona, California, Hawaii, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Nevada, New Jersey, New Mexico, North Carolina, Oregon, South Carolina, Tennessee, Utah, Vermont, Virginia, Washington, and Wyoming.

²⁴ Connecticut, Illinois, New Jersey, New York, and the Virgin Islands cover public sector employment only. See also 29 C.F.R. § 1956 (2010) State Plans for the Development and Enforcement of State Standards Applicable to State and Local Government Employees in States Without Approved Private Employee Plans.

²⁵ See U.S. DEP'T OF LABOR, OFFICE OF INSPECTOR GENERAL, Audit Report No. 05-00-001-10-001, EVALUATING THE STATUS OF OCCUPATIONAL SAFETY AND HEALTH COVERAGE OF STATE AND LOCAL GOVERNMENT WORKERS IN FEDERAL OSHA STATES 17 (Feb. 9, 2000), available at <http://www.oig.dol.gov/public/reports/oa/2000/05-00-001-10-001.pdf>.

²⁶ See 29 U.S.C. § 668, and 29 C.F.R. §§ 1960.1-1960.90 (2010).

jurisdiction in some states; state plan jurisdiction under the Act for both private and state employees for some states; state plan jurisdiction over strictly public sector employees in some states; and the general exemptions from coverage for state and local government employees, some laboratory employers in the public sector may not be protected by the Act or any substantially equivalent state regulation.

There are two main aspects of OSH Act regulation: the general duty clause and health and safety-based standards. Under the general duty clause, each covered employer must “furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.”²⁷ In the laboratory context, the general duty clause may be difficult to use as a tool to enforce laboratory-based safety violations because of the uncertainty in determining whether a laboratory safety issue constitutes a “recognized hazard” absent an established standard.²⁸ The OSH Act also provides OSHA, the federal agency charged with enforcing the OSH Act, with regulatory power to develop workplace health and safety standards that apply to particular workplace safety and health circumstances.²⁹ OSHA has promulgated multiple regulatory provisions that may apply to workplace health and safety issues arising in a laboratory context. These include federal regulations that detail rules for working with hazardous chemicals in laboratories,³⁰ specify personal protective equipment requirements for employees working with human blood and rules preventing the exposure to blood-borne pathogens,³¹ and outline requirements for personal protective equipment for employees who work with chemicals, radiation, or dangerous gases.³² Other regulations set concentration limits on chemical contaminants, air contaminants, and other toxic substances³³ and establish communication rules regarding health hazards and safety dangers between employers and employees.³⁴ OSHA regulations do not yet cover many potentially infectious agents studied and developed in biolaboratories.³⁵

²⁷ 29 U.S.C. § 654(a)(1).

²⁸ See OSHA Guidance, *supra* note 1, at 4.

²⁹ See 29 U.S.C. § 654(a)(2).

³⁰ See 29 C.F.R. § 1910.1450.

³¹ See § 1910.1030.

³² See 29 C.F.R. §§ 1910.1320-1910.138.

³³ See §§ 1910.1000-1910.1450.

³⁴ See § 1910.1200.

³⁵ See COUNCIL FOR RESPONSIBLE GENETICS, WORKER SAFETY IN BIOLOGICAL LABORATORIES 4 (September 2010), available at <http://www.councilforresponsiblegenetics.org/pageDocuments/J118SCXSUR.pdf>.

National Institutes of Health and CDC Guidelines

National Institutes of Health (NIH) Guidelines also regulate laboratory safety in primarily an advisory fashion. For example, the CDC and NIH issue guidelines that describe safety practices for biological laboratories, including a manual on Microbiological and Biomedical Laboratories (BMBL)³⁶ and guidelines for Research Involving Recombinant DNA Molecules (rDNA).³⁷ The BMBL is generally advisory for both public and private organizations.³⁸ The NIH guidelines on rDNA research are mandatory for federal institutions and institutions that receive NIH support for such research.³⁹

Select Biological Agent Regulations

Federal regulations of select biological agents also relate to safety in the laboratory setting. The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 required the Department of Health and Human Services (DHHS) to establish regulations regarding the possession, use, and transfer of select agents and toxins.⁴⁰ In March 2005, the DHHS established a final rule on the handling, storage, and security of listed biological agents and toxins to protect public health and safety.⁴¹

In October 3, 2011, proposed rules⁴² were published for a comment period ending December 3, 2011, which was subsequently extended until January 17,

³⁶ See generally CTRS. FOR DISEASE CONTROL & PREVENTION, PUB. HEALTH SERV., & NAT'L INST. OF HEALTH, BIOSAFETY IN MICROBIOLOGICAL AND BIOMEDICAL LABORATORIES (5th ed. 2009) [hereinafter BMBL], available at <http://www.cdc.gov/biosafety/publications/bmb15/BMBL.pdf>.

³⁷ See generally NAT'L INST. OF HEALTH, NIH GUIDELINES FOR RESEARCH INVOLVING RECOMBINANT DNA MOLECULES (Oct. 2011) [hereinafter NIH Guidelines], available at http://oba.od.nih.gov/oba/rac/Guidelines/NIH_Guidelines.pdf.

³⁸ See BMBL, *supra* note 36, at 6. "The recommended practices, safety equipment, and facility safeguards described in the first edition of BMBL and expanded in the fifth edition are advisory in most circumstances. The intent was and is to establish a voluntary code of practice, one that all members of a laboratory community will together embrace to safeguard themselves and their colleagues, and to protect the public health and environment." *Id.*

³⁹ See NIH Guidelines, *supra* note 37, at 11 ("As a condition for NIH funding of recombinant DNA research, institutions shall ensure that such research conducted at or sponsored by the institution, irrespective of the source of funding, shall comply with the *NIH Guidelines*").

⁴⁰ See Public Health Security and Bioterrorism Preparedness and Response Act of 2002, Pub. L. No. 107-188, § 201-02, 116 Stat. 594 (2002).

⁴¹ See generally Select Agents Rule, 42 C.F.R. §§ 73.1-73.21 (2010).

⁴² See Possession, Use, and Transfer of Select Agents and Toxins, 76 Fed. Reg. 61,206 (proposed Oct. 3, 2011) (to be codified at 42 C.F.R. pt. 73).

2012. The proposed rules made substantial changes to the burdens for reporting behaviors of other employees on researchers and designated officials.⁴³

The proposed regulations seek to accomplish several purposes. They would add a new definition for occupational exposure,⁴⁴ modify the regulatory exclusions for persons transferring toxins,⁴⁵ impose new reporting obligations on responsible officials,⁴⁶ and require additional occupational safety and health programs and training requirements related to select agents.⁴⁷ As explained more thoroughly later in this article, the proposed regulations impose new responsibilities on employees who work around and are responsible for safety issues related to select agents. However, the proposed regulations provide few, if any, specific whistleblower protections or liability protections for employees and employers who handle select agents. It is not clear whether the employee's own Security Risk Assessment (SRA) might be in jeopardy for failure to report suspicious behaviors described in the regulation.

⁴³ See generally *id.*

⁴⁴ See *id.* at 61,214. "We are proposing to add a definition for Occupational exposure based on the definition used in the Occupational Safety and Health Administration (OSHA) regulations found in 29 CFR 1910.1030." *Id.*

⁴⁵ See *id.* at 61,214 - 61,215. "We are proposing to require that the person transferring toxins in amounts which would otherwise be excluded from the provisions of the select agent regulations would be excluded only if the transferor: (1) Can show that the transferor used due diligence (i.e., reasonably justified by a prophylactic, protective, bona fide research, or other peaceful purpose) to assure that the recipient has a legitimate need to handle or use such toxins; and (2) reports to CDC if they detect a known or suspected violation of Federal law or become aware of suspicious activity related to the toxin." *Id.*

⁴⁶ See *id.* at 61,215. "We are additionally proposing to add a requirement that the security plan include procedures for the Responsible Official to immediately notify the Federal Bureau of Investigation (FBI) of suspicious activity that may be criminal in nature and related to the entity, its personnel, or its select agents or toxins. We believe that any criminal activity of this kind should be immediately and directly reported to the FBI so they can initiate an investigation or other appropriate response." *Id.*

⁴⁷ See *id.* at 61,216. "We are also proposing that the biosafety plan must include provisions for the implementation of an occupational health program for individuals with access to Tier 1 select agents and toxins. We believe aspects of an individual's health may be relevant to their suitability to access biological select agents and toxins; identification of potential health problems and review of medication or treatment that may affect security and safety is paramount; and, occupational health programs should inform scientists of the types of medications and treatments that might have a potential deleterious effect on working safely and securely with select agents and toxins." *Id.* "We are proposing to amend the regulations in 42 CFR 73.15 that contain provisions of mandatory training for staff and visitors who work in or visit areas where select agents or toxins are handled or stored to provide security awareness and incident response training. We believe these additional training initiatives are needed to ensure that (1) personnel will be better trained to safeguard select agents and toxins from thefts, losses, intentional releases, or unauthorized access and (2) personnel will be better trained to ensure that select agents and toxins are safeguarded during exigent circumstances that include natural and man-made disasters." *Id.*

The regulations also envision the development of further administrative regulations through Guidance Documents. For example, the CDC has proposed the development of guidance for the reporting of suspicious behavior, which may be used as an enforcement tool, although guidance will not be subject to notice and comment under the Administrative Procedure Act.⁴⁸ The areas where guidance documents may be developed in relation to the select agent regulations include, but are not limited to, security, mandatory reporting, training, and safety.⁴⁹

The following sections are some of the key excerpts from the proposed select agent regulations.

§ 73.11 Security

(8) Describe procedures for how the Responsible Official will be informed of suspicious activity that may be criminal in nature and related to the entity, its personnel, or its select agents or toxins; and how the Responsible Official will notify the Federal Bureau of Investigation (FBI) of such activity, . . .

⁴⁸ See Possession, Use, and Transfer of Select Agents and Toxins, 76 Fed. Reg. 61,206, 61,217. “We are specifically requesting comments from the regulated community and any other interested persons on the development of one or more guidance documents that would serve to provide assistance in the interpretation of the select agent regulations . . . [w]e welcome public comment on the use of Web sites, articles, or other sources that may be used to develop such documents, in addition to suggestions as to what elements should be included as useful examples. These documents would serve as a resource to the regulated community as a whole.” *Id.*

⁴⁹ See *id.* “The areas where guidance documents may be developed in relation to the select agent regulations include, but are not limited to: 1. Aspects of the required security plan. These may include, but are not limited to:

- Standards for information security;
- Development of suitability or personnel reliability practices, including pre-access and ongoing assessment processes of persons who will have access to Tier 1 select agents or toxins;
- Procedures for the method by which an entity's Responsible Official will coordinate his or her efforts with the entity's safety and security professionals to ensure security of Tier 1 select agents or toxins and have access to relevant information from all professionals dealing with biological select agents and toxins safety and security;
- Development of a self- and peer-reporting program to track incidents or conditions that could affect an individual's ability to safely access or work with Tier 1 select agents and toxins; and
- Layered physical security protection of assets for entities housing Tier 1 select agents and toxins.

2. Aspects of the required biosafety plan, *e.g.*, components of an occupational health program for individuals with access to Tier 1 select agents and toxins; and

3. Aspects of the required training, *e.g.*, best practices for development of a security awareness training program.” *Id.*

(e) In addition to the requirements contained in paragraphs (c) and (d) of this section, the security plan for an individual or entity possessing a Tier 1 select agent or toxin must also:

(1) Describe procedures for conducting a pre-access suitability assessment of persons who will have access to a Tier 1 select agent or toxin;

(2) Describe procedures for how an entity's Responsible Official will coordinate their efforts with the entity's safety and security professionals to ensure security of Tier 1 select agents and toxins and share, as appropriate, relevant information; and

(3) Describe procedures for the ongoing assessment of the suitability of personnel with access to a Tier 1 select agent or toxin. The procedures must include:

(i) Self- and peer-reporting of incidents or conditions that could affect an individual's ability to safely have access to or work with select agents and toxins, or to safeguard select agents and toxins from theft, loss, or release;

(ii) The training of all entity employees on entity policies and procedures for reporting, evaluation, and corrective actions concerning the assessment of personnel suitability to access Tier 1 agents and toxins; and

(iii) The ongoing suitability monitoring of individuals with access to Tier 1 select agents and toxins.⁵⁰

§ 73.14 Incident response.

(e) Entities with Tier 1 select agents and toxins must have the following additional incident response policies or procedures:

(1) The incident response plan must fully describe the entity's response procedures for failure of intrusion detection or alarm system; and

(2) The incident response plan must describe notification procedures for the FBI in the event of a theft or suspicious activity that may be criminal in nature involving a Tier 1 select agent or toxin.⁵¹

⁵⁰ Possession, Use, and Transfer of Select Agents and Toxins, 76 Fed. Reg. 61,206, 61,224 (2011).

⁵¹ *Id.* at 61,225.

§ 73.16 Transfers.

(1) A registered individual or entity transferring an amount of a HHS toxin otherwise excluded under the provisions of § 73.3(d) of this part must:

(1) Transfer the HHS toxin only after using due diligence and documenting that the recipient has a legitimate need (reasonably justified by a prophylactic, protective, bona fide research, or other peaceful purpose) to handle or use such toxins. The HHS Secretary retains the authority to, without prior notification, inspect and copy or request the submission of the due diligence documentation to the CDC.

(2) Report to CDC any known or suspected violation of Federal law or suspicious activity related to the toxin.⁵²

Federal Investigations of Laboratory Accidents

The U.S. Chemical Safety and Hazard Investigation Board (CSB) “is an independent federal agency charged with investigating industrial chemical accidents.”⁵³ “The agency’s board members are appointed by the President and confirmed by the Senate.”⁵⁴ The agency does not have the power to promulgate regulations or issue fines or citations; however, the agency does make recommendations to regulatory agencies such as OSHA, the Environmental Protection Agency, companies, industry groups, labor groups, and others.⁵⁵ The CSB is non-regulatory and independent of other agencies in order that its investigations may review the effectiveness of regulations and regulatory enforcement.⁵⁶

III. WHISTLEBLOWER LAWS APPLICABLE TO LABORATORY/SCIENTIFIC EMPLOYEES

Laboratory workers employed on scientific research projects are generally required to be trained and employ relevant safety practices. As previously indicated, a variety of federal, state, or local workplace health and safety guidelines may apply in the laboratory context. In addition, there is a culture

⁵² *Id.* at 61,226.

⁵³ United States Chemical Safety and Hazard Investigation Board, CSB Mission, <http://www.csb.gov/about/mission.aspx> (last visited May 16, 2012).

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Id.*

within the scientific research community of developing their own voluntary ethical codes of conduct. This includes self-regulation of health and safety violations in the laboratory setting. Within this regulatory context, it appears that formal whistleblower protections for laboratory employees are less developed and less clear than those in other worker populations. The latter part of this article will examine current laws that protect laboratory whistleblowers/scientific workers and provide observations regarding these laws. It will also consider ways to facilitate the reporting of safety and health violations in the laboratory setting.

A primary whistleblower protection structure is to encourage whistleblowing by protecting employees who bring wrongdoing to light, making it illegal for employers who find out about such complaints to take adverse employment action against employees. Simply put, employees are unlikely to point out violations unless the law protects against such reprisals, and whistleblower statutes provide remedies if retaliation occurs. Even with such protections, employees may still be reticent to come forward to report violations. There are a mix of federal and state laws that may protect laboratory employees who report safety and health violations of both federal law and relevant guidelines.

Federal Law

OSH Act Whistleblower Provision for Private-Sector Employees

The starting point for whistleblower protection for laboratory employees under federal law is the whistleblower protection provision of the OSH Act.⁵⁷ The general duty clause and federal regulatory standards provide the legal foundation for complaints about workplace health and safety violations in the laboratory context. Laboratory workers in private organizations covered by the OSH Act who file complaints about health and safety violations to OSHA, other federal agencies with authority to regulate or investigate occupational safety and health conditions, state or local occupational safety and health agencies, or to their employer, are protected from retaliation by their employer under Section 11(c) of the OSH Act.⁵⁸ An employer cannot legally fire, transfer, demote, reduce pay, or reduce work hours, or take other types of adverse employment actions because of a laboratory worker's complaints about alleged health and safety violations.⁵⁹

⁵⁷ See 29 U.S.C. § 660(c)(1). "No person shall discharge or in any manner discriminate against any employee because such employee has filed any complaint or instituted or caused to be instituted any proceeding under or related to this chapter or has testified or is about to testify in any such proceeding or because of the exercise by such employee on behalf of himself or others of any right afforded by this chapter." *Id.*

⁵⁸ MARK A. ROTHSTEIN, OCCUPATIONAL SAFETY AND HEALTH LAW 347-48 (2011 ed. 2011).

⁵⁹ *Id.* at 343-44 (noting that the OSH Act whistleblower provision "protects employees against sanctions imposed by altering compensation, terms, conditions, or privileges of employment").

The OSH Act also protects employees from retaliation for refusing to perform work in the limited circumstance where performance of the work would objectively present a real danger of death or serious injury and insufficient time exists to eliminate the danger through the normal complaint process.⁶⁰ Remedies for unlawful retaliation include reinstatement of the employee, back pay, and possible punitive damages.⁶¹ Whistleblower protection should apply to complaints made by laboratory workers to the CDC, Institutional Biosafety Committees for which the NIH Office of Biotechnology Activities provides oversight, and other federal sub-agencies that receive safety and health complaints in a laboratory setting.

Although the OSH Act provides whistleblower protection, its whistleblower protection scheme is not typically viewed as robust. The OSH Act whistleblower provisions are commonly viewed as being fairly weak due to a couple of procedural impediments. First, there is a very short window of time to report any alleged retaliation for engaging in protected conduct. A laboratory employee who believes that he or she has been retaliated against for complaining about safety issues must file a complaint with OSHA within 30 days after the occurrence of the alleged retaliation.⁶² Second, the OSH Act whistleblower provisions do not include a private right of action.⁶³ Consequently, a laboratory employee claiming retaliation would have to depend on the Department of Labor for enforcing his or her whistleblower rights in federal district court.⁶⁴ The statute does not give the employee the right to directly sue an employer. Regardless of the OSH Act whistleblower provisions' imperfections, it remains a key avenue of protection for laboratory employee whistleblowers.

Whistleblower Protection Act (Federal Employees)

There are also a number of other federal whistleblower protection provisions that may have some relevance to laboratory employees and scientific researchers, depending on which federal agency employs the worker. For example, some scientific workers who work for the federal government may claim the whistleblower protections of the Whistleblower Protection Act of 1989 (WPA).⁶⁵ The WPA provides protections from employment-based retaliation for federal employees who make a disclosure concerning illegal or improper government

⁶⁰ 29 C.F.R. § 1977.12(b)(2) (2010).

⁶¹ 29 U.S.C. § 660(c)(2) (2010).

⁶² See 29 U.S.C. § 660(c)(2), and 29 C.F.R. § 1977.15(d).

⁶³ See 29 U.S.C. § 660(c)(2), and 29 C.F.R. § 1977.3; see also Rothstein, *supra* note 58, at 351. (noting that there is no private right of action under Section 11(c)).

⁶⁴ 29 U.S.C. § 660(c)(2).

⁶⁵ See generally 5 U.S.C. §§ 1213-1215 (West 2012).

actions.⁶⁶ WPA whistleblower actions are often instituted through the Merit Systems Protection Board or the Office of Special Counsel.⁶⁷ However, not all federal employees that work in scientific research activities are covered by the WPA because the Act excludes federal employees employed by the FBI, the Central Intelligence Agency, National Security Agency, the Defense Intelligence Agency, the National Geospatial-Intelligence Agency, and other agencies that conduct foreign intelligence or counterintelligence.⁶⁸ In recent years, Congress has introduced legislation to extend WPA whistleblower protections for additional federal employees, but these bills have not become law.⁶⁹ The Whistleblower Protection Enhancement Act of 2007 would have amended the WPA to extend whistleblower protections to federal employees who specialize in national security issues, to employees of companies with government contracts, and to employees of science-based agencies by providing protection for employees who disclose information regarding “any action that compromises the validity or accuracy of federally funded research and analysis” and “the dissemination of false or misleading scientific, medical, or technical information.”⁷⁰

Whistleblower Protections for Federal Employees Under the OSH Act

Federal employees who complain about workplace safety and health violations may also receive whistleblower protection under the federal agency provision of the OSH Act.⁷¹ Executive Order 12196 and 29 C.F.R. Part 1960.46 prohibit federal agencies from discharging or otherwise discriminating against federal employees who make safety and health complaints or request OSHA inspections.⁷²

⁶⁶ 5 U.S.C. § 2302(b)(8) (making it a prohibited personnel practice for a supervisor to take an adverse personnel action against a covered employee who discloses information the employee “reasonably believes evidences—(i) a violation of any law, rule, or regulation, or (ii) gross mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety . . .”).

⁶⁷ § 7701; *see also* §§ 1211-1215.

⁶⁸ 5 U.S.C. § 2302(a)(2)(C).

⁶⁹ *See* Whistleblower Protection Enhancement Act of 2007, H.R. 985, 110th Cong. (2007); Whistleblower Protection Enhancement Act of 2011, S. 743, 112th Cong. (2011).

⁷⁰ *See generally* Whistleblower Protection Enhancement Act of 2007, H.R. 985, 110th Cong., §§ 10-13 (2007). *See also* L. PAIGE WHITAKER, CONG. RESEARCH SERV., RL 33918, THE WHISTLEBLOWER PROTECT ACT: AN OVERVIEW 14 (2007), *available at* <http://www.fas.org/sgp/crs/natsec/RL33918.pdf>.

⁷¹ 29 U.S.C. § 668(a).

⁷² *See* Exec. Order No. 12,196, 45 Fed. Reg. 12,769 (Feb. 27, 1980), *and* 29 C.F.R. § 1960.46(a) (2010) (requiring federal agencies to establish procedures so that “no employee is subject to restraint, interference, or coercion, discrimination or reprisal for filing a report of an unsafe or unhealthy working condition”).

Federal Industry-Specific Whistleblower Statutes

Finally, there are a host of specialized industry-specific whistleblower protection laws that may apply to certain laboratory workers within a specialized industry. These federal statutes include, but are not limited to: the Energy Reorganization Act of 1974, Asbestos Hazard Emergency Response Act of 1986, Clean Air Act, Comprehensive Environmental Response Compensation, and Liability Act of 1980, Federal Water Pollution Control Act, Safe Drinking Water Act, Solid Waste Disposal Act, Toxic Substances Control Act, International Safe Container Act, National Transit Systems Security Act of 2007, Pipeline Safety Improvement Act of 2002, Surface Transportation Assistance Act of 1982, and the Consumer Product Safety Improvement Act of 2008.⁷³ For example, a worker in a nuclear laboratory facility that reports a safety issue may receive whistleblower protection under the Energy Reorganization Act (the Act).⁷⁴ The Act provides occupational safety and health discrimination protections for employees who are operators, applicants, contractors, and subcontractors of nuclear power plants that are licensed by the Nuclear Regulatory Commission and for employees of contractors working under contract with the U.S. Department of Energy.⁷⁵ A notable aspect of these whistleblower protection statutes is the unique administrative procedures for handling such claims. Whistleblower claims under these statutes are investigated by OSHA and generally may be pursued through the Office of Administrative Law Judges. Adverse decisions by an ALJ may be appealed to the Administrative Review Board.⁷⁶

⁷³ See generally Energy Reorganization Act of 1974, 42 U.S.C. § 5851; Asbestos Hazard Emergency Response Act of 1986, 15 U.S.C. § 2651; Clean Air Act, 42 U.S.C. § 7622; Comprehensive Environmental Response Compensation, and Liability Act of 1980, 42 U.S.C. § 9610; Federal Water Pollution Control Act, 33 U.S.C. § 1367; Safe Drinking Water Act, 42 U.S.C. § 330j-9(i); Solid Waste Disposal Act, 42 U.S.C. § 6971; Toxic Substances Control Act, 15 U.S.C. § 2622; International Safe Container Act, 46 U.S.C. § 80507; National Transit Systems Security Act of 2007, 6 U.S.C. § 1142; Pipeline Safety Improvement Act of 2002, 49 U.S.C. § 60129; Surface Transportation Assistance Act of 1982, 49 U.S.C. § 31105; Consumer Product Safety Improvement Act of 2008, 15 U.S.C. § 2051.

⁷⁴ See 42 U.S.C. § 5851(a)(1).

⁷⁵ § 5851(a)(2).

⁷⁶ See Jarod S. Gonzalez, *A Pot of Gold at the End of the Rainbow: An Economic Incentives-Based Approach to OSHA Whistleblowing*, 14 EMP. RTS. & EMP. POL'Y J. 325, 328 (2010) (describing the basic administrative procedures for non-OSH Act whistleblower claims investigated by OSHA).

State Laws

The applicability of the various federal whistleblower laws which protect workers conducting scientific research in a laboratory setting is complex. Additional complexity arises because a laboratory worker may have state law whistleblower protections depending on the workplace location of the worker. These state law rights could arise through statutes, common law, or both and may provide different substantive and procedural rights than federal law. The following are several examples of possible application of state whistleblower laws to laboratory and scientific workers.

State Workplace Safety and Health Whistleblower Statutes

States that regulate workplace safety and health under OSHA-approved state plans have state whistleblower statutory protections for covered employees that report unsafe or unhealthy working conditions.⁷⁷ These state anti-retaliation provisions are generally included in a state's statutory equivalent to the federal OSH Act. Scientific and laboratory workers who work in states where a state workplace safety and health anti-retaliation provision exists should know about the details of the provision and the procedures for asserting rights under state law.⁷⁸ For example, if a scientific laboratory worker in a laboratory located in California complained to the California Division of Occupational Safety and Health or to his or her employer about unsafe laboratory conditions and the employer terminated the worker's employment for making such a complaint, the California Occupational Safety and Health Act's anti-retaliation provision makes such adverse employment action illegal and provides remedies to the worker.⁷⁹

General State Whistleblower Statutes

A research scientist or laboratory worker who engages in whistleblowing may also be able to receive protection under a general state whistleblower statute that protects employees who report violations of the law. These state whistleblower

⁷⁷ See, e.g., California Occupational Safety and Health Act, CAL. LAB. CODE §§ 6310-6312 (2012); Michigan Occupational Safety & Health Act § 65, MICH. COMP. LAWS § 408.1065 (2011); Minnesota Occupational Safety & Health Act, MINN. STAT. § 182.654, Subdivision 9 (2011); Washington Industrial Safety & Health Act, WASH. REV. CODE § 49.17.160 (2011).

⁷⁸ The applicability of state anti-retaliation protection for workplace safety and health complaints may be preferred to federal OSH Act whistleblower protection for a variety of reasons. One important difference between federal and state laws is that a state statute may provide a private right of action, unlike the federal Section 11(c) claim. See *Brevik v. Kite Painting, Inc.*, 416 N.W.2d 714, 717 (Minn. 1987) (interpreting Minnesota Occupational Safety and Health Act to provide a private cause of action for retaliation for engaging in workplace safety and health protected activities).

⁷⁹ See California Occupational Safety and Health Act, CAL. LAB. CODE §§ 6310-6312 (2012).

statutes vary across the country. Some states protect both private and public employees, some states protect only public employees, and some states do not provide any protection. The Texas Whistleblower Act protects public employees who, in good faith, report violations of the law by the employing governmental entity to an appropriate law enforcement authority.⁸⁰ Accordingly, a research scientist working for a state university in Texas who complains about workplace safety and health violations in a laboratory setting to law enforcement officials would be protected by the Texas Whistleblower Act. However, a Texas research scientist employed by a private institution who makes a similar whistleblower complaint would not be protected under the Texas statute. The outcome is different in Connecticut. Connecticut has a general whistleblower statute that protects both private and public employees who report suspected violations of federal, state, or local law to a public agency.⁸¹ Accordingly, Connecticut research scientists and laboratory workers who complain about laboratory safety violations could receive whistleblower protection regardless of whether they are employed by private or public employers.

State Common Law Claims

Some states allow for a common law wrongful discharge claim if an employer discharges an employee who complains about violations of the law.⁸² In these jurisdictions, a research scientist or laboratory worker who reports workplace safety and health violations in a laboratory setting and is discharged for such protected conduct may have a state common law wrongful discharge claim.

Federal Preemption of State Laws

As mentioned previously, a laboratory employee who reports workplace safety and health violations in a laboratory setting and is discharged for such conduct may have a state statutory whistleblower claim or a common law wrongful

⁸⁰ TEX. GOV'T CODE ANN. § 554.002(a) (West 2011). "A state or local governmental entity may not suspend or terminate the employment of, or take other adverse personnel action against, a public employee who in good faith reports a violation of law by the employing governmental entity or another public employee to an appropriate law enforcement authority." *Id.*

⁸¹ CONN. GEN. STAT. § 31-51m(b) (2011). "No *employer* shall discharge, discipline or otherwise penalize any *employee* because the employee, or a person acting on behalf of the employee, reports, verbally or in writing, a violation or a suspected violation of any state or federal law or regulation or any municipal ordinance or regulation to a public body, or because an employee is requested by a public body to participate in an investigation, hearing or inquiry held by that public body, or a court action." *Id.* (emphasis added). The statute defines the term "employer" and "employee" to cover both public and private employees and public and private employers. CONN. GEN. STAT. § 31-51m(a).

⁸² See, e.g., *Flenker v. Willamette Industries, Inc.*, 967 P.2d 295 (Kan. 1998); *English v. General Electric Co.*, 496 U.S. 72 (1990); *Schweiss v. Chrysler Motors Corp.*, 922 F.2d 473 (8th Cir. 1990).

discharge claim against the employer depending on the state where the laboratory employee is located. These state whistleblower protection laws are in addition to any federal whistleblower laws that may be applicable. Nevertheless, employers often challenge state law whistleblower claims on preemption grounds. The contention is that a federal whistleblower law, such as Section 11(c) of the OSH Act or the whistleblower provision of the federal Energy Reorganization Act, preempts state law whistleblower claims.

Preemption can occur in a number of instances including, when federal law expressly preempts state law, when federal law occupies the field so completely that preemption may be inferred, or there is a conflict between federal and state law. Although a few courts have ruled that the OSH Act whistleblower provision preempts a state wrongful discharge action,⁸³ other courts have concluded that federal whistleblower laws applicable to workplace safety and health complaints will not preempt state law whistleblower claims.⁸⁴ There is a general consensus that the OSH Act whistleblower provision does not “expressly preempt” or “field preempt” state law whistleblower claims.⁸⁵ Several courts have concluded that there is not a conflict between federal whistleblower law and state wrongful discharge claims, even if the federal whistleblower remedies are different than state law wrongful discharge remedies. In *English v. General Electric Company*, the United States Supreme Court ruled that the federal whistleblower provision of the Energy Reorganization Act (ERA) did not preempt a Missouri state law tort claim brought by a nuclear energy worker who claimed that her employer terminated her employment because of her complaint about nuclear-safety standards violations at the facility where she worked, including the failure of her co-workers to clean up radioactive spills in the laboratory.⁸⁶ The Court determined that a remedial difference between the federal and state law—the ERA whistleblower provision did not permit punitive damages, while the state

⁸³ See, e.g., *Grant v. Butler*, 590 So. 2d 254 (Ala. 1991) (refusing to recognize Alabama wrongful discharge tort for complaints about workplace safety conditions because the OSH Act whistleblower provision provided a federal remedy); *Braun v. Kelsey-Hayes Co.*, 635 F. Supp. 75 (E.D. Pa. 1986) (finding the OSH Act preempted Pennsylvania wrongful discharge claim stemming from employee’s reporting of improper disposal of hazardous waste in the workplace).

⁸⁴ See, e.g., *Flenker v. Willamette Industries, Inc.*, 967 P.2d 295 (Kan. 1998); *English v. General Electric Co.*, 496 U.S. 72 (1990); *Schweiss v. Chrysler Motors Corp.*, 922 F.2d 473 (8th Cir. 1990).

⁸⁵ The OSH Act contains a provision that specifically saves certain state law remedies from express preemption. See 29 U.S.C. § 653(b)(4). “Nothing in this chapter shall be construed to supersede or in any manner affect any workmen’s compensation law or to enlarge or diminish or affect in any other manner the common law or statutory rights, duties, or liabilities of employers and employees under any law with respect to injuries, diseases, or death of employees arising out of, or in the course of, employment.” *Id.*

⁸⁶ See *English v. General Electric Co.*, 496 U.S. 72, 89 (1990).

law action did—was insufficient to find preemption.⁸⁷ In *Schweiss v. Chrysler Motors Corp.*, the Eighth Circuit Court of Appeals utilized similar reasoning as the *English* Court and held that the OSH Act whistleblower provision did not preempt a state law wrongful discharge claim brought by an employee who reported alleged workplace safety and health violations at an assembly plant to OSHA.⁸⁸

In the absence of federal preemption, scientific and laboratory whistleblowers may be able to take advantage of state statutory whistleblower claims and state common law wrongful discharge claims if the employee is discharged for reporting safety and health violations in the laboratory. The availability of state law claims depends on the location of the laboratory worker as states vary with respect to the presence and substance of whistleblower statutes and whether common law wrongful discharge claims are recognized.

IV. EMPLOYEE WHISTLEBLOWER GUIDANCE IN THE LABORATORY CONTEXT

Scientific laboratory workers face substantial uncertainty regarding whether anti-retaliation whistleblower protection will apply to complaints filed involving laboratory safety issues. Whistleblower protection rights may vary depending on whether the laboratory worker is a private or public employer, the state where the scientific or laboratory worker is employed, and the industry in which the laboratory worker is employed. Furthermore, even if federal, state, or local laws protect laboratory whistleblowers, the considerable variance existing among the substance of the potentially applicable whistleblower laws mean that the rights and remedies available to laboratory workers are not uniform.

A primary issue that a prospective laboratory whistleblower should be cognizant of is whether any potential complaints constitute protected activity. The prospective laboratory whistleblower should educate himself or herself on applicable laboratory safety and health laws to know whether a reasonable, good faith belief exists for reporting a suspected health and safety violation. Complaints not based on a reasonable belief of an underlying laboratory safety and health law violation are unlikely to be protected by an applicable whistleblower law. In addition, the laboratory worker should recognize that whistleblower statutes often vary as to the entity or entities where complaints must be made in order to constitute protected conduct. Some statutes may only protect complaints by the employee to law enforcement agencies, which is often referred to as external whistleblowing. Some statutes protect a laboratory employee's safety-based complaints to his or her employer, which is often called

⁸⁷ *Id.*

⁸⁸ *Schweiss v. Chrysler Motors Corp.*, 922 F.2d 473, 476 (8th Cir. 1990).

internal whistleblowing. There are even some statutes that protect both external and internal whistleblowing.

A variety of other practical issues may affect the rights of a laboratory whistleblower. Most statutes will protect “materially adverse employment actions” like a discharge or demotion. Other personnel actions that fall short of a discharge from employment or demotion may not be actionable under a particular statute. Causation standards may vary depending on the whistleblower statute. A statute may require a laboratory whistleblower plaintiff to prove the adverse employment action was taken by the employer solely “because of” the complaints. Other statutes may adopt a more lenient standard like a “motivating factor” or “contributing factor” standard. Finally, the remedies available to a successful laboratory whistleblower may vary depending on the statute.

V. CONCLUSION

Whistleblower provisions that protect employees who complain about illegalities in the workplace provide a measure of certainty in that employees cannot be economically punished by the employer for making complaints of wrongdoing. Without this level of protection, prospective whistleblowers will be less likely to complain about wrongdoing. The same basic policy underlies whistleblower laws applicable to laboratory employees in the health and safety arena. Whistleblower laws applicable to laboratory employees should be part of an overall regulatory approach to improve safety and health in scientific laboratories.

It appears, however, that whistleblower protections for laboratory employees are less developed than for workers in many other industries. There are several possible reasons for the lack of development in whistleblower protections for scientific workers. One reason is the culture of cooperation and self-regulation of safety matters within the greater scientific community, as opposed to explicit statutory protections for workers.⁸⁹ For example, the current Select Agent regulations regarding the possession, use, and transfer of select agents do not appear to have the type of explicit whistleblower protections for scientists who complain about safety and health violations connected to these toxins.⁹⁰ The current Select Agent regulations address restricting access to select

⁸⁹ Dan Dubno, Remarks made pursuant to a meeting held at the American Association for the Advancement of Science regarding the Technical Communities Self-Detection of Illicit Activity (July 29, 2010). “The strongly held consensus is that the scientific community is best qualified to regulate itself . . . that self-regulation is not only possible but preferable to external regulation from law enforcement or other sources . . . and that to best insure autonomy and effective self-regulation, the bio-science community has profound motivation for conducting significant self-detection efforts against illicit activity.” *Id.*

⁹⁰ See Victoria Sutton, *The Culture of Science and the Regulation and Litigation of Biodefense Research*, 6 ST. THOMAS L. JOURNAL 523 (2009).

agents, requiring a biosafety plan, requiring training, and requiring reports of any release or loss of toxins to the government.⁹¹ But explicit employment-based whistleblower protection for scientists who complain about biosafety violations does not appear to be available. As stated earlier within this article, the United States Department of Health and Human Services and the Centers for Disease Control and Prevention proposed changes to the Select Agent Regulations in October 2011.⁹² The proposed changes focused on adding certain select agents to the list, removing certain select agents from the list, and making taxonomic changes.⁹³ They also addressed biosecurity, training, and biosafety issues.⁹⁴ However, the proposed regulations do not appear to provide any sort of specific workplace-based protection against employer retaliation for employees who make complaints about biosafety and biosecurity violations of the regulations. While the OSH Act whistleblower provision would presumably apply to many scientists who complain about biosafety issues, more explicit whistleblower protections, tailored to the unique aspects of the safety dangers posed by the use of select agents and toxins, would be prudent.

Although peer-oversight in some professional cultures works well, additional ideas should be considered to help build a whistleblower safety culture that fits the needs and spirit of the scientific research community. Possible areas of future study include the benefits of using anonymous hotlines, financial incentives for whistleblowing in the laboratory context, greater development of internal organizational protocols for improving laboratory safety, and more explicit and detailed employment-based legal protections for laboratory whistleblowers and reporters of safety violations.

⁹¹ See 42 C.F.R. §§ 73.1 – 73.21 (West 2012).

⁹² See *generally* Possession, Use, and Transfer of Select Agents and Toxins, 76 Fed. Reg. 61,206 (proposed Oct. 3, 2011) (to be codified at 42 C.F.R. pt. 73). The comment period for the proposed changes ended on January 17, 2012.

⁹³ *Id.* at 61,221 – 61,224.

⁹⁴ *Id.* at 61,224 – 61,226.