verify that the process is operating appropriately.

D. Effective Dates

The proposed requirements for Sanitation SOP's, antimicrobial treatments, cooling standards for livestock carcasses, and microbial testing would be effective 90 days after the date of the final rule's publication in the Federal Register. This would afford those establishments not yet performing the proposed interventions the time to make necessary adjustments. Minimal preparation would be required to begin microbial testing. The requirement to begin tracking test results in accordance with the moving sums process-control procedures and reporting the results to FSIS would be effective 6 months after promulgation of the final rule. FSIS is proposing to hold establishments accountable for meeting the interim targets for pathogen reduction beginning 2 years after promulgation of the final rule.

The 6-month Hazard Analysis period would begin no less than 6 months before the HACCP phase-in date, as set forth for each of nine process categories and for small establishments, as provided in the proposed 9 CFR 326.7 and 381.607.

FSIS invites comment on these proposed effective dates.

III. Other Issues and Initiatives

A. Legal Authority

The Poultry Products Inspection Act (PPIA) (21 U.S.C. 451 et seq.) and the Federal Meat Inspection Act (FMIA) (21 U.S.C. 601 et seq.) were enacted to protect the health and welfare of consumers by assuring that meat and poultry products distributed in commerce are "wholesome, not adulterated, and properly marked, labeled and packaged" (21 U.S.C. §§ 451 and 602). The term "adulterated" is defined in the Acts to include any meat or poultry product that is "unsound, unhealthful, unwholesome, or otherwise unfit for human food" (21 U.S.C. §§ 453 (g)(3) and 601(m)(3)). Meat and poultry products that bear or contain any poisonous or deleterious added substance which may render them injurious to health, and meat and poultry products that bear or contain inherent substances in sufficient quantity to ordinarily render them injurious to health are also "adulterated" within the meaning of the

Acts (21 U.S.C. §§ 453(g)(1) and 601(m)(1)).

The term "adulterated" is also defined to include meat and poultry products that have been "prepared,

packed, or held under insanitary conditions whereby [they] may have become contaminated with filth, or whereby [they] may have been rendered injurious to health" (21 U.S.C. §§ 453(g)(4) and 601(m)(4)). The FMIA specifically authorizes the Secretary to prescribe the rules and regulations of sanitation under which establishments shall be maintained" and to refuse to allow meat or meat food products to be labeled, marked, stamped, or tagged as "inspected and passed" if the sanitary conditions of the establishment are such that the meat or meat food products are rendered adulterated (21 U.S.C. §608). Similarly, the PPIA requires all official establishments to be operated "in accordance with such sanitary practices, as are required by regulations promulgated by the Secretary" and authorizes the Secretary "to refuse to render inspection to any establishment whose premises, facilities, or equipment, or the operation thereof, fail to meet the requirements of this section" (21 U.S.C. § 456).

In addition to this specific authority, the Secretary has broad authority under both Acts to promulgate rules and regulations necessary to carry out the Acts (21 U.S.C. § 463, 621).

Based on these statutory provisions, FSIS is proposing that establishments take affirmative action, including adherence to sanitation standard operating procedures, the application of antimicrobial treatments and microbial testing, the adherence to cooling requirements for livestock carcasses, and the development and adherence to HACCP plans, to reduce the occurrence and levels of pathogenic bacteria on meat and poultry products and to protect the health and welfare of consumers. FSIS is also proposing, based on these statutory provisions, to establish interim targets for quantitative reductions in the incidence of contamination of meat and poultry with microbial pathogens. These actions to protect public health and improve the safety of meat and poultry products are authorized by the various provisions of the Acts referenced above.

B. Improving Food Safety at the Animal Production Stage

There is wide agreement that ensuring food safety requires taking steps throughout the continuum of production, slaughter, processing, distribution, and sale of livestock and poultry carcasses and meat and poultry products to prevent hazards and reduce the risk of foodborne illness. The U.S. food safety continuum begins on the farm. From there, animals are transported to markets and then to slaughtering establishments.

While FSIS is proposing significant enhancement in its regulatory oversight of FSIS-inspected slaughter and processing establishments, improving food safety at the animal production stage would require a different approach. Many producers recognize the need to play an active role in reducing microbiological and chemical hazards that originate on the farm. FSIS will work with producers and others to develop and foster implementation of food safety measures that can be taken on the farm and prior to the animals entering the slaughter facility to reduce the risk of harmful contamination of meat and poultry products. Within this context, the voluntary application of HACCP principles can be useful in establishing the CCP's within the farm management and live animal transportation arenas where pathogenic organisms can enter the food chain.

HACCP principles can be utilized also to structure voluntary national animal health programs that focus on risk reduction and producer incentives to reduce the prevalence of a given pathogen. Such voluntary programs can be built upon similar, successful food safety efforts presently in use. These include industry-sponsored quality assurance programs, such as the Milk and Dairy Beef Quality Assurance Program, a ten-point grassroots education effort by the National Milk Producers Federation and the American Veterinary Medical Association; pork and beef quality assurance programs developed by the National Pork Producers Council and the National Cattlemen's Association; the American Veal Association's quality assurance program; the GMP guidelines developed by the National Broiler Council and several quality assurance efforts by the United Egg Producers; the chemicalresidue avoidance program of the National Turkey Federation; and the flock health-certification program of the American Sheep Industry Association. All these programs focus on actions that individual producers can take to improve the quality and safety of the products they market. These programs provide a foundation for building future on-farm food safety initiatives.

There may also be a link between onfarm control measures and the proposed mandatory implementation of HACCP in FSIS-inspected meat and poultry establishments. For example, establishments may determine that the external cleanliness or degree of external contamination of animals with pathogenic microorganisms at the time the animals enter the slaughter