274b Gosniiokht Pharmaceutical Program

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GosNIIOKhT, the State Scientific Research Institute of Organic Chemistry and Technology, is national leading R&D organization for chemical demilitarization. For years it was famous for development of basic chemical technologies in Russia. Among the most important developments are: • Ethylene oxide • Acrylonitrile, caprolactam, • Adiponitrile and polychlorovynil resins • Production of phenol and acetone by cumene method • Hydrocyanic acid from methane and ammonia • Cyanogene chloride, cyanurchloride, pesticides of thyazine, methylmetacrylate, organic glass, propylene oxide, antifreeze, complexones, rubber, stabilizers • Organophosphorus pesticides • Fluoroorganic lubrications (for space and underwater work) • Fluoro monomers and polymers, highly pure polytetrafluoroethylene (radio-chemical method) • Etc. GosNIIOKhT developed all the technologies for destruction of chemical weapons and currently is putting them in practice, including running the CWD facilities. At the same time GosNIIOKhT is looking for the conversion of its capaibilities, and chose pharmaceutical development and production as one of the major directions for the future. GosNIIOKhT started its pharmaceutical program in 1987, and at the moment it has 14 licenses for production of medicinal substances. The ampoules line at the GosNIIOKhT is producing final-stage medicines which meet the GMP standards. The vivarium in the Toxicology Department is being upgraded to meet GLP standards for preclinical studies and the development of standards. The GosNIIOKhT pharmaceutical strategy includes increase of production of generics, meeting GLP and GMP standards at all the stages of development and production, as well as the development new medicines. The goal is to have in 10 years over 60 % of the market of analgetics and a stable share of the market of general drugs in Russia. There are also developments at the GosNIIOKhT that can be used for mutual benefit on the basis of partnership. These include a method for the production of high-purity arsine by a method of synthesis developed at GosNIIOKhT based on electrolysis of the system H3AsO4—H2O, a method for production of propylene carbonate through carboxylation of propylene oxide in the presence of phthalocyanic complexes, a method that was developed and patented recently, a method for production of biodiesel through acidic catalytic process , and a method of development of medicinal forms of the antipsychotic Galoperidol and the analgetic Tramadol that needs preclinical study and completion of permit documentation.