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NDSU General Counsel

Fax Cover Sheet

Rick D. Johnson, General Counsel
 North Dakota State University
 PO Box 5011, Fargo, ND 58105-5011
 701-231-7215 ♦ 701-231-6358 Fax
Rick.Johnson@ndsu.edu

To: *Tim Purdon Vogel Law Firm - 3 is marked* Date: *11-26-07*
 Fax: *701-258-9905*

Comments:

*The DEA mou left with
 Burton Johnson.*

Rick

Dr. Coster
 cc: *Ken Grafton*

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UNITED STATES DEPARTMENT OF JUSTICE
DRUG ENFORCEMENT ADMINISTRATION

In the Matter of:

North Dakota State University-Fargo
Burton Johnson

OFFICE OF GENERAL COUNSEL
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NDSU

MEMORANDUM OF AGREEMENT

I. Parties to the Agreement

This Memorandum of Agreement (hereinafter "MOA") is between the North Dakota State University-Fargo (hereinafter "NDSU") and the Drug Enforcement Administration, United States Department of Justice (hereinafter "DEA").

II. Purpose of the Agreement

This MOA pertains to the DEA Researcher Registration of NDSU (DEA Document Control Number D24219201H), the application for which was submitted by Dr. Burton Johnson on behalf of NDSU to conduct research with schedule I controlled substances, specifically marihuana (DEA controlled substance code number 7360), and tetrahydrocannabinols ("THC") (DEA controlled substance code number 7370), including the production of cannabis plants. Dr. Johnson's research addresses the recovery of agronomic varieties of marihuana intended for industrial purposes. Under the terms and conditions specified in this MOA, the application for registration will be granted in accordance with 21 U.S.C. 823(a).

This MOA is to ensure that the manufacture of marihuana pursuant to the registration is carried out with sufficient safeguards to prevent diversion of controlled substances and in conformity with the Controlled Substances Act (hereinafter "CSA").

III. Definitions Used in this Agreement

The definitions contained in the CSA and DEA regulations apply to this MOA, along with additional definitions listed below. Where indicated, some of the CSA definitions are reiterated here for the sake of clarity.

1. The term "cannabis plant" means any plant of the genus cannabis, including, but not limited to, any plant of the species Cannabis sativa L.;

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2. The term "cannabis plant material" means any material, product, mixture, or preparation containing any amount of any part of the cannabis plant;

3. The term "marihuana" means all parts of the cannabis plant that are included in the CSA definition of "marihuana." *See* 21 U.S.C. § 802(16). Therefore, the term "marihuana" includes all parts of the cannabis plant whether growing or not, the resin extracted from any part of such cannabis plant, and every compound, manufacture, salt, derivative, mixture or preparation of such cannabis plant, its seeds or resin.;

4. The term "researcher" means, with respect to a particular controlled substance, a scientific investigator or other person who is both (1) registered with DEA to conduct research with that controlled substance and (2) licensed, registered, or otherwise permitted by the jurisdiction in which he does research to conduct research with that controlled substance.;

5. The term "manufacturer" means a person who manufactures a drug or other substance, whether under a registration as a manufacturer or under authority of registration as a researcher, as defined in section III(2), above, and includes the production, preparation, propagation, compounding or processing of marihuana in accordance with 21 U.S.C. § 802(15);

6. The term "production" includes the manufacture, planting, cultivation, growing, or harvesting of a controlled substance. *See* 21 U.S.C. § 802(22).

IV. Nature and Purpose of the Registration

The research protocol submitted by the applicant, entitled *Industrial Hemp Production Guidelines for North Dakota*, provides for the growing of cannabis plants for the purpose of industrial research. Specifically, the purpose of the project is to define best management practices regarding stand establishment, fertility and pest management, and harvest procedures with respect to the cultivation of cannabis plants for industrial purposes in North Dakota.

1. Cannabis seeds will be imported from a source in Canada only upon the express, written approval of the DEA. In addition, no importation of cannabis seeds may take place unless all the following conditions are met: (1) Approximately 50 pounds of seed will be imported for the first year studies. Subsequent year studies (if any) may use imported seed and/or seed harvested from the research plants. The area needed to conduct this research will be limited to two acres.

2. The *Cannabis* seeds will be planted and allowed to grow into mature *Cannabis* plants before being harvested. The plants will be monitored throughout the growing season and various growth factors will be studied. Tests will also be performed to determine effective weed control in hemp production.

V. Distribution of Marihuana Prohibited

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NDSU shall not distribute any quantity of marihuana or any derivatives of marihuana to any person other than an authorized DEA employee [or other individuals authorized by DEA].

VI. Specific Controls to Ensure Accountability and Prevent Diversion

1. Generally: NDSU shall maintain records and security commensurate with the requirements of the CSA and the DEA regulations. The controls specified below ensure proper accounting of all *Cannabis* that it handles. Consistent with the general CSA record keeping requirements, NDSU must maintain for a period of at least two years every inventory or other record specified herein and must permit DEA to inspect and copy such records whenever requested, without requiring an Administrative Inspection Warrant.

2. Records Relating to Seeds:

- a. *Inventories generally*. Marihuana seeds (unless sterilized) fall within the definition of marihuana. Therefore, NDSU must maintain inventories and records of receipt and disbursement of such seeds. See 21 U.S.C. § 827. Given the volume of marijuana seeds NDSU will handle, the inventory of marihuana seeds shall be recorded by the weight of all seeds on hand on the date the inventory is taken. A theoretical yield of the number of seeds should be calculated based on the number of seeds per given weight (e.g., 20,000 per pound). NDSU shall maintain such inventory in written, typewritten, or printed form at the registered location;
- b. *Initial Seed Inventory*. In accordance with 21 U.S.C. § 827(a) and 21 CFR § 1304.11(b), NDSU shall make a complete and accurate record of all marihuana seeds on hand at the close of business on the date it first engages in the manufacture/production of marihuana pursuant to the registration. If, at such time NDSU has no seeds on hand, this shall be recorded as the initial inventory;
- c. *Biennial seed inventories*. Beginning no later than two years after the date of the initial inventory and no later than every two years thereafter, NDSU shall make a complete and accurate record of all marihuana seeds on hand;
- d. *Records of seed plantings*. NDSU shall maintain the following records relating to the planting of marihuana seeds, beginning on the date the seeds are planted:
 - i. The variety of seeds planted;
 - ii. Date of each planting;
 - iii. Batch or Lot Number assigned to each planting;
 - iv. The total weight of the seeds used in the planting.;
 - v. The square acres on which the seeds for each are planted;

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- vi. The theoretical yield of harvested biomass. In calculating this theoretical yield, NDSU shall record and consider the number of seeds or seedlings planted, the percentage of seeds or seedlings expected to grow, the percentage of plants expected to be culled, the theoretical number of plants at harvest and the theoretical yield of harvested of biomass;
 - vii. The actual yield at harvest, including the date, number of plants, weight of the plants harvested, and an explanation accounting for any difference between the theoretical and actual yield at harvest;
- e. *Records of seeds received.* NDSU shall maintain records of all marihuana seeds received. Such records shall include the identity of the distributor, the date of receipt and the quantity (weight) received. If NDSU collects seeds from its own plants, it shall so indicate and record the date such seeds were collected and the weight of such seeds.

3. Additional Controls Relating to Planting and Harvesting

- a. NDSU shall contact the DEA Diversion Program Manager (hereafter, "DEA DPM") in Chicago, Illinois, at least two weeks prior to planting any seeds or seedlings;
- b. NDSU shall maintain a master control card with the following information:
 - i. Batch or lot number;
 - ii. Number of acres to be planted (not to exceed two acres);
 - iii. Weight of seeds planted;
 - iv. Theoretical yield of acreage planted, measured in number of plants;
 - v. Percentage of theoretical yield to be culled;
 - vi. Theoretical yield of harvested biomass after drying and screening;
- c. For identification purposes, NDSU shall record batch or lot numbers at the beginning of the production process. NDSU shall maintain such information throughout the production process up to and including the point where biomass is destroyed;
- d. NDSU will notify the DEA DPM at least 2 weeks prior to the harvest. NDSU will permit and assist DEA in conducting an inventory of the harvested plants if desired by DEA;
- e. Any disposal of cannabis material will be conducted in accordance with 21 CFR 1307.21. NDSU will document on a DEA Form 41 all plants destroyed prior to harvest. No plants shall be removed from the growing

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field enclosure;

- f. Biomass inventories. As part of its initial and biennial inventories, NDSU shall record the amounts of biomass on hand in the same manner described above for recording inventories of seeds;
- g. Separate Records. In accordance with 21 C.F.R. § 1304.21(c), NDSU shall maintain separate records for each registration/independent activity for which it is registered.

VII. Security Controls

1. NDSU shall provide and maintain effective controls and procedures to guard against theft and diversion of *Cannabis*. Due to the widely publicized location of the registered site, the quantity of *Cannabis* seed which is being stored at any one time and the frequency and duration of time when the site is left unsupervised by authorized NDSU personnel, as well as to avoid the theft of *Cannabis*, NDSU shall institute and maintain the following security measures:

- a. With respect to *Cannabis* seed, NDSU shall institute the following:
 - i. All *Cannabis* seed shall be stored in a secure safe or steel cabinet which meets the requirements of 21 CFR § 1301.72(a)(1), which shall be protected by an alarm system and shall be located within a storage shed previously approved by DEA located within the fenced area;
 - ii. A direct, dedicated telephone land-line shall be installed to the registered site which is to be used to transmit the alarm signal directly to a central protection company or a state or local police agency that has a legal duty to respond;
 - iii. The alarm system shall be tested by NDSU authorized personnel at least once a week to ensure proper and continuous operation;
- b. With respect to the *Cannabis* plants that are grown by NDSU, NDSU shall apply the security provisions for the growth areas that were approved by DEA for the manufacture of *Cannabis*, which is not to exceed two acres. All cultivation of *Cannabis* plants will be in the growing field enclosure. All *Cannabis* seed and leaf material shall be kept in the security container within the growing field enclosure. These security provisions include, among other things, the following:
 - i. Fencing that is at least ten feet high, and flush with the ground;
 - ii. Fencing material of no less than ten-gauge wire mesh;
 - iii. No more than a one and three-quarter inch opening in fence;
 - iv. Vertical posts at least two inches in diameter, set below the frost

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- line;
 - v. A one and one-half inch diameter horizontal bracing at bottom, middle and top;
 - vi. Top of fence equipped with at least three strands of barbed wire, one inch high;
 - vii. Fifteen foot clear zones both inside and outside of fence line;
 - viii. Illumination of said clear zones;
 - ix. Minimal gate openings, with gates made of same material as fence;
 - x. Gate hardware installed within the fenced area;
 - xi. GPS coordinates of field location;
- c. Enclosure Security Devices:
- i. All entry points equipped with key or combination locks;
 - ii. All entry points equipped with contact sensors;
 - iii. Intrusion detection system inside the fence covering clear zones;
 - iv. All electronic security devices attached to a control panel;
 - v. Control panel attached to dedicated/supervised land-line -or- Equipped with standard phone line with a cellular backup System equipped with battery backup of at least twenty-four hours;
 - vi. An alarm system must send a signal to a state or local law enforcement agency or to a manned central station with twenty-four hour monitoring
- d. Access to the plants will be managed by Dr. Burton Johnson. Growth facility personnel providing *Cannabis* plant care will be accompanied by authorized personnel during care of *Cannabis* plants. Access to the growing fields should be limited to the absolute minimum number of people needed. The names of the needed individuals and Dr. Burton's immediate research assistant shall be provided to the DEA-DPM, located in Chicago, Illinois, once the research begins. Prior to making any changes to the personnel with authorized access to the growing fields or the secured container, NDSU shall notify the DEA-DPM in writing to obtain approval of such changes;
2. With respect to post-growth material and other *Cannabis* substances, NDSU shall:
- a. Store all *Cannabis* within the growing field and security container. Dr. Burton Johnson and his immediate research assistant shall be the only people with access to the contents of the security container;
 - b. Maintain the records required by 21 C.F.R. § 1304. To meet this requirement, NDSU agrees to maintain a perpetual inventory list identifying the controlled substance, quantity on hand, quantity

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removed/returned, signature, date, and name of any authorized person requesting the controlled substance;

- c. Conduct background checks as described in 21 C.F.R. §§ 1301.90 and 1301.93.

VIII. Additional Terms and Conditions

1. If and when the protocols submitted to DEA by NDSU are no longer part of the research conducted by NDSU, NDSU will notify the DEA, Chicago Field Division, whereupon the registrations will be modified or surrendered as appropriate as to be determined by DEA;
2. NDSU will immediately notify the DEA of any change in NDSU's authorization from the State of North Dakota to engage in research involving the manufacture of *Cannabis*. Additionally, NDSU will provide with each DEA application for re-registration a written statement describing the status of NDSU's authorization by the State of North Dakota, including any time limitations that may exist with respect to such authorization. If authorization requirements from the State of North Dakota or any local authorizing officials are more stringent than DEA's requirements, the more stringent requirement shall apply;
3. NDSU will include with each DEA application for re-registration a written statement, in accordance with 21 CFR §1301.13(h), listing the quantity of each basic class of controlled substances to be imported or manufactured during the registration period for which application is being made;
4. Any violations of the MOA by NDSU may result in DEA's initiating administrative proceedings to revoke the registration and/or deny any renewal applications. In addition, nothing in this MOA relieves NDSU of any criminal or civil liability that might arise if NDSU were to commit any violation of the CSA;
5. In carrying out its obligations under the MOA, NDSU will necessarily meet many of its obligations under the CSA and DEA regulations. Where, however, the CSA or DEA regulations impose additional obligations not covered by the MOA, NDSU must also meet such obligations.

XI. Duration of the Agreement

The MOA shall take effect on the date it is signed by all of the signatories listed below. The MOA shall remain in effect for the duration of the registration. If and when NDSU applies to renew the registration, the MOA will be reevaluated. If DEA determines that it is appropriate to renew the registration, NDSU and DEA may, by mutual agreement, renew the MOA or modify the MOA as circumstances warrant.

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FOR NORTH DAKOTA STATE UNIVERSITY:

BURTON JOHNSON, Ph.D.
Associate Professor
North Dakota State University

Date: _____

FOR THE DRUG ENFORCEMENT ADMINISTRATION:

GARY G. OLENKIEWICZ
Special Agent in Charge
Chicago Field Division

Date: _____