

AFFIDAVIT

A. Elizabeth Gordon, Ph.D.

KAFB 9/1/90
ENTERED

I am the permitting supervisor for the Hazardous and Radioactive Waste Bureau, a position held since April, 1989. The previous positions I have had within the Bureau are: environmental supervisor from March, 1988 to March, 1989; permit writer from March, 1987 to March, 1988.

My employment history prior to working for the Bureau is as follows:

Assistant Professor	Florida A&M University	1981-03/1986
Research Associate	Cornell University	1976-1981
Entomologist	Applied Scientific Research Corporation of Thailand (Peace Corps)	1974-1976
Post-doctoral Fellow	Stroud Water Research Center	1972-1974

My major responsibilities while holding these positions were:

- o Designed and executed three ecosystematic studies for three major educational and/or research institutions.
- o Wrote and executed 12 publications, numerous reports, 13 presentations and seven seminars for four major research and/or educational institutions. Co-edited the monograph for a regional United States Department of Agriculture research project.
- o Principal and co-principal investigator on three proposals submitted to National Science Foundation and/or National Institutes of Health. Responsible for design and analyses, text, and budget.
- o Solely responsible for preparation and conduct of lectures and laboratories for two undergraduate and one graduate course.

My graduate education was in Entomology at the University of Georgia (masters and doctoral degrees) and my undergraduate education was in Zoology at Mills College. My area of specialization was the systematics and ecology of aquatic insects, but I have had many courses related to environmental issues including Pollution Ecology, Population Ecology, Community Ecology and Economic Entomology.

KAFB1041



A. Elizabeth Gordon
affidavit, p. 2.

Listed below are my publications.

- New Species of Cheumatopsyche from the southeastern United States (Trichoptera: Hydropsychidae), by H.H. Ross, J.C. Morse and A.E. Gordon. Proc. Biol. Soc. Wash. 84: 301-5. 1971.
- Descriptions of females of four species of Cheumatopsyche from the southern United States (Trichoptera: Hydropsychidae). Proc. Biol. Soc. Wash. 85: 270-86. 1972.
- A new species of Cheumatopsyche (Trichoptera: Hydropsychidae) from the northwestern United States, by A.E. Gordon and S.D. Smith. Notulae Naturae, Acad. Nat. Sci., Philadelphia, No. 450: 3pp. 1974.
- A synopsis and phylogenetic outline of the Nearctic members of Cheumatopsyche (Trichoptera: Hydropsychidae). Proc. Acad. Nat. Sci., Philadelphia 126: 117-60. 1974.
- Distribution of the family Hydropsychidae (Trichoptera) in the Savannah River Basin of North Carolina, South Carolina and Georgia, by A.E. Gordon and J.B. Wallace. Hydrobiologia 46: 405-23. 1975.
- The limnological parameters associated with the cytotypes of the Simulium (Simulim) venustum/verecundum complex (Diptera: Simuliidae) in New York State, by A.E. Gordon and E.W. Cupp. Can. J. Zool. 58: 973-81. 1980.
- Notes on the systematics, distribution, and bionomics of black flies (Diptera: Simuliidae) in the northeastern United States (editor, with E.W. Cupp), Taxonomy, pages 4-5; Cytotaxonomy, page 5; Compilation of tables, pages 9-57. Search: Agriculture. 1983.
- The cytotaxonomy of three species in the jenningsi-group of the Subgenus Simulium (Diptera: Simuliidae) in New York State. Can. J. Zool. 62: 347-54. 1984.
- Preliminary observations on the limnological factors associated with three species of the Simulium jenningsi group in New York State (Diptera: Simuliidae). Freshwater Invert. Biol. 3: 48-51. 1984.
- The Trichoptera of Florida: A preliminary Survey. Proc. 4th Intern. Sym. Trichoptera. Series Entomologica, 30: 161-66. ed. John C. Morse. Dr. W. Junk Publishers. The Hague. 1984.
- Three new species of Cheumatopsyche (Trichoptera: Hydropsychidae) and the presumed female of C. helma Ross from Alabama, by A.E. Gordon, S.J. Harris and P. Lago. The Florida Entomologist, 69: 314-318. 1986.
- New Species of Leptoceridae (Trichoptera) from Thailand. by F. Schmid and A.E. Gordon. In preparation.

As permitting supervisor for the Bureau, I am responsible for overseeing the permitting process for the Bureau. Within this

process, there are two major determinations as to the completeness of a facility's permit application. The first determination is administrative completeness and requires determining whether or not all the issues have been addressed; the second is technical completeness and requires determining how well the application address the technical and regulatory requirements. Once an application is declared administratively and technically complete, the permit writer proceeds to write a draft permit which is submitted to public comment for 45 days. It is during this period that anyone can call for a hearing on the draft permit. All comments received during the public comment period and during a hearing, if one is held, must be considered in drafting the final permit. A permit writer may modify or recommend denying any portion of the draft permit based upon comments received from the public. If the permit writer decides that modifications are necessary, these are made to the draft permit and this becomes the operating permit. It is sent to the Director of the Environmental Improvement Division (EID) with the recommendation that the permit be issued. Any permit signed by the Director becomes effective after 30 days, unless appealed.

As a permit writer, I have completed the whole process for one facility's permit and have completed the administrative completeness determination on two other permit applications. As a permitting supervisor, I have overseen five applications to the draft permit stage and one to the final permit stage. I have had to finish the process on two draft permits, i.e. respond to public comments and write the final permit. One of these was the permit for Kirtland Air Force Base (KAFB); consequently, I am very familiar with this permit.

The hazardous waste program established by the Resource Conservation and Recovery Act (RCRA) of 1976 and the New Mexico Hazardous Waste Act regulates all facilities which generate, transport and store, treat and/or dispose (TSD) of hazardous waste. However, within this regulated universe, only the facilities storing, treating or disposing of hazardous waste are required to have a permit. For the purposes of RCRA, compliance with the permit becomes compliance with the regulations. Once permitted, a facility is no longer inspected for compliance with the regulations, but for compliance with its permit.

Within the RCRA permit program, the three major foci are: complete waste characterization; proper handling; containment and mitigation of any release so as to protect the environment and human health. It is the first focus, waste characterization, that drives the permit. A generating facility need only know that the waste is hazardous; a TSD facility must know all the characteristics of the waste that will affect its proper handling and, failing proper handling, what must be done to contain and mitigate any release. These issues are addressed in the various sections of

the permit application and these sections become attachments to the permit.

Module I of any permit details the general permit conditions. These are the very generic requirements regarding definitions, severability of the permit conditions, emergency reporting requirements, duties and requirements, required documents and records.

Module II details the general facility conditions. It is this section that incorporates most of the permit application sections as permit attachments.

The attachment on the waste analysis plans is the section related to the focus on full characterization of the waste stream(s). Here the facility details what parameters will be analyzed for, the sampling techniques and analytical methods to be used, and the frequency of characterization. Knowledge of process may be allowed if it is fully documented.

There are four attachments related to proper management. The first is security and in this section, the facility accounts as to how it will prevent unknowing entry to areas containing hazardous waste. It may either use a surveillance system or have a physical barrier. The section on inspections requires that the facility check for malfunctions and deteriorations that could result in a release. The inspections must be conducted often enough to identify problems in time to correct them. The personnel training sections details the classroom or on-the-job training the facility will give employees. The training must be in hazardous waste management procedures that are relevant to the positions the employees hold. The section on ignitable, reactive and incompatible wastes lays out the provisions that will be taken to avoid explosions and to prevent the mixing of incompatible wastes that may produce toxic fumes, etc. A major aspect of the RCRA program is the tracking from the cradle to the grave all hazardous waste and the requirements for that are contained in the section on manifesting and recordkeeping. The final section on proper handling details how the facility, at the end of its operating life, will remove or dispose of all hazardous waste and decontaminate all equipment. The facility must all provide a financial mechanism for ensuring that the closure can be done. Federal facilities are exempt from this requirement.

The remaining sections address issues related to containment and mitigation of any release. The section on preparedness and prevention details the requirements regarding communication equipment, fire extinguishers, testing of such equipment, aisle space required by emergency equipment and arrangements made with local authorities such as fire departments and hospitals. The contingency plan outlines the emergency response measures the

A. Elizabeth Gordon
affidavit, p. 5.

facility will take in response to a fire, explosion or any unplanned release of hazardous waste; agreements with fire departments and hospitals; personnel who have the authority to act in case of an emergency; reporting requirements.

The remaining Modules in a permit are specific to the storage, treatment or disposal activities particular to that facility. In KAFB's case that is storage in containers. The module lists the wastes that are permitted and prohibited and the quantities allowed. Also delineated are the activities that KAFB will do to ensure proper handling of the containers. Among the requirements are: the waste must be compatible with the containers; containers must be in good condition; incompatible waste are kept in separate bays; container must be closed except when waste in being adding; closure and recordkeeping requirements. Also detailed are the engineering features of the container storage units that ensure containment, i.e. type and capacity of secondary containment, type of sealant on the floor, means of preventing run-off and run-on such as berms, etc.

I have read KAFB's docketing statement and the seven issues under appeal are:

1. Whether the inclusion of Section III.M. Contingency Planning for Building 1024 and Section III.N. Notification of the Albuquerque Fire Department and Medical, Retirement and Convalescent Facilities in the permit is more restrictive than federal regulation, is arbitrary and not supported by substantial evidence.
2. Whether the inclusion of a 90-day automatic reclassification of materials as waste is not otherwise in accordance with the law, is arbitrary and capricious and not supported by the evidence?
3. Whether the inclusion of annual waste stream verifications required by NMEID was arbitrary, capricious and not supported by evidence on the record.
4. Whether by the creations of Group I and Group II waste the NMEID has exceeded its authority and imposed restrictions more stringent than federal regulations?
5. Whether the requirement of specific tests on all waste exceeds federal regulations and thus is more stringent than federal regulations?
6. Whether the training requirements of the permit exceed federal regulation, are unsupported on the record, and are otherwise unsupported at law?

7. Throughout the permit the use of the words "permittee," "owner," and "operator" appear to be used interchangeably and in an inconsistent manner, thus making it unclear as to which requirements are applicable to the permittee and owner--KAFB or the operator--DRMO or both.

Issues #3 through #5 all relate to the waste analysis plan, which is the driving force of the permit, i.e. complete waste characterization. Issue #2 can be viewed as being related to the waste analysis plan or to proper handling. Issue #6 is an aspect of proper handling and Issue #1 is the focus on mitigation of releases. Issue #7 revolves around definitions. The portions of the permit not appealed are security, inspections, provisions for ignitable, reactive and incompatible wastes, preparedness and prevention and recordkeeping, all related to proper handling. However, the fact that KAFB is appealing portions of the waste analysis plan affects the whole permit, even those portions not appealed. The waste analysis plan, as stated above, is the driving force of the permit. It determines accurate waste characterization and accurate waste characterization determines what is needed for proper handling and the containment and mitigation of releases.

In regards to the effect of staying the whole permit, KAFB states that during the appeal, the Part A permit would continue in force (i.e. that KAFB would continue to manage the units under interim status). It also states that KAFB is not using the newly permitted hazardous waste storage facility during the pendency of the appeal. First of all, the permit is for three storage units. So, although it would not be using the new storage unit, Building 1024, it could be using the other units. If the whole permit is stayed, these units would still be regulated according to the interim status standards. However, the interim status standards are less stringent and less site-specific than those of the permitted status. The permitted status assures the public of tighter control over the hazardous wastes at KAFB.

If KAFB does not use Building 1024 during pendency of the appeal, staying Issue #1 will have little effect on human health and the environment. However, if the Building 1024 were to be used, then the people at the medical and retirement facilities within one-quarter mile of the facility could be at risk if there were a fire or explosion at Building 1024. The contingency plan details what the facility must do within its property boundaries if there is an emergency; it does not force the facility to address the impact of an emergency on nearby facilities or the city and county agencies that must assist those nearby facilities.

The 90-day automatic reclassification of materials as waste was included in order to preclude the possibility that waste could be stored for unlimited amounts of time under the guise of material, a concern raised during public comment. If this section is stayed,

A. Elizabeth Gor n
affidavit, p. 7.

then this condition cannot be applied to the other two units still in use.

Staying the Issues related to the waste analysis plan jeopardizes the whole permit. Again, the waste must be correctly characterized in order for the facility to know how to handle it on a day-to-day basis and during any emergency. As stated in the response-to-comments letter, "It is EID's conclusion, that given the rate of turnover of base personnel, the rate of change in processes and products used by the base generators, and the infancy of Kirtland's waste stream identification program, annual reverification is appropriate."

Although Issue #6 is in regards to the training of personnel at the generator sites and is primarily a proper handling concern, in KAFB's case it also impacts upon the waste analysis plan. KAFB relies extensively upon information from the generators regarding the waste stream from that generation point. If these personnel are not properly trained, they may not only mishandle hazardous waste, they may pass incorrect information to the DRMO regarding the hazardous waste. Consequently, the DRMO may not be handling the waste correctly.

In regards to Issue #7, according to RCRA, both the operator and the owner are responsible and neither should be "stayed" from fulfilling its responsibilities.

KAFB also states in its motion to stay that it intends to file a permit modification in a further attempt to resolve the issues during the pendency of this appeal. A modification of this magnitude would be a major modification and would entail the full permitting process, i.e. review of the portions subject to modification, preparation of a draft permit and full public review. Given the fact that the waste analysis plan would be modified, that could require review of most of the permit. Even if that is not the case, the process could take over six months. EID has four outstanding permit applications for storage facilities and a statutory mandate that permits for these facilities be issued by November 1992. EID could not state that at this time that it would be able to process the modification upon receipt. It does have the requirement to get interim status facilities into the permitted status.