CHANUTE AFB
ILLINOIS

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 3365

DEPARTMENT OF THE AIR FORCE
AIR FORCE BASE CONVERSION AGENCY

August 6, 1998

AFBCA/DB Chanute
501 E. Condit Drive, Suite A
Rantoul IL 61866

SUBJECT: **CORRECTED** Restoration Advisory Board (RAB) Meeting Minutes, May 7, 1998

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1. The quarterly RAB meeting for Chanute Air Force Base was held at 1 Aviation Center in the Village of Rantoul May 7, 1998 at 7:00 p.m. Mr. Suits facilitated the meeting and asked all attendees to introduce themselves.

2. Mr. Suits asked Sylvia Crowell of AFCEE to introduce Mr. Ron Porter of the Human Systems Center in San Antonio, Texas and Mr. Drew Rak, toxicologist with AFCEE. Mr. Porter and Mr. Rak gave a risk assessment presentation to the group. Mr. Porter said risk is an adverse health effect that can be applied to both the human and the ecological side. Mr. Porter said nature and extent of contamination have to first and foremost be considered. Mr. Porter also said characterization of exposed population such as kids, pregnant women, healthy adult males, must be evaluated. To determine the receptors in a work place or industrial environment, the baseline risk assessment does the evaluation and indicates the risk if no mitigation is done at all. Mr. Porter outlined the steps of risk assessment. Mr. Porter said data collection and evaluation followed by exposure assessment and finally toxicity are the steps. Mr. Porter gave an example of how a number used in a rat can be applied to humans by applying a safety factor. Mr. Steve Nussbaum of IEPA took exception to the example which seemed to leave an impression that there is a threshold. Mr. Nussbaum said that is not allowed. Mr. Porter agreed and said he did not mean to be misleading. He told the audience the State of Illinois cancer slope factor or non-cancer comparison value are used. Mr. Porter finally summarized his presentation by saying Risk Assessment is an evaluation of potential human health and environmental impact from chemical exposure, radiation, and medicine. Risk assessment helps determine which of the risks on sites need to be reduced or eliminated. He said it also forms the foundation for the risk manager to make decisions about which sites to do first and which remediation strategies to use. Also in summary, Mr. Steve Nussbaum added three key elements must be present to have risk. They are the source, the receptor, and the pathway from the source to the receptor. If any one of the three are removed there is no risk.

3. Mr. Suits proceeded to agenda Item 2 -- Remedial Action Sites. Most of the sites are in Operable Unit 2 (OU-2), with a recent large effort on the landfills. The landfills and Fire Training Area 2 (FTA-2) are restricted areas and "restricted area" signs have recently been installed to so designate. Additionally, recent data has indicated a need to install fencing to restrict access to

these areas and this will be accomplished within the next several months. Mr. Boudreaux indicated he wished to discuss alternatives to the fencing and Mr. Suits concurred with the need for such a discussion.

4. Mr. Suits proceeded with Agenda Item 4 -- "Landfills Progress and Status". Mr. Bryan Rundell, Jacobs Engineering, reported on landfill progress. He mentioned his previous (Feb 98 RAB) reporting of the geophysical survey which gave an indication of the location of waste deposits in the landfill. Mr. Rundell described the recent Cone Penetrometer Technology (CPT) investigation -- a hole punching instrument that helps to indicate sand verses clay layers of soil under the surface. The instrument indicated an unconfirmed 8 feet thick sand layer at the thickest portion in the Wisconsinan till. It had not been anticipated at earlier dates that there were sand units beneath the landfills and having this determination forces the installation of wells to monitor the groundwater in this unit. The CPT also indicated large areas of clay. Mr. Rundell indicated the sand layer was about 15 to 20 feet below ground surface, and under Illinois EPA regulations could be classed as a Class 1 aquifer drinking water standards Village ordinance however prohibits domestic wells within the Village limits. The geophysical maps of Landfills 1 and 2 shows the refuse to be stored in random pits whereas Landfills 3 and 4 are more systematically organized in linear trenches. Pits were dug in selected areas of the landfills (selected from the geophysical maps in areas where refuse is most likely to be found) and from those areas soil samples were obtained from the landfill surface and subsurface. If water flowed into the trench, it was sampled also. Results of the samples were screened to determine if there was any risk to human health or the environment. Toxicity Characteristic Leaching Procedure (TCLP) tests on the samples from Landfill 1 indicate that in two cases lead exceeds the EPA's published levels for characteristic waste. In Landfill 2, a subsoil sample also exceeded acceptable level for lead. Some dioxins, formed by incomplete combustion of materials, were also found to be above screening levels in Landfill 2. If a human lived on the landfill area or spent large amounts of time walking on the landfills, there would likely be risk resulting from these contaminants. However, access to activities on and use of the areas will be restricted at first by the Air Force and ultimately by the Village of Rantoul. Mr. Rundell proceeded with his discussion of Landfill 4. Landfill 4 contains dioxins and furans that are above levels that permit commercial industrial use. Dioxins and furans are formed when ordinary plastics with chlorine in them are burned at low temperatures (not so when burned at 2000 degrees F). Mr. Rundell pointed out the location of Landfill 4 in the extreme southeast corner of the Base. In response to questions, he indicated the landfill data will at some point in time go to the information repository (in the Village of Rantoul library) in the form of an approved final document.

Mr. Rundell went on to say another contaminant found in the landfills are PAHs (polyaromatic hydrocarbons) which generally are derived from petroleum products and contain hydrogen and carbon. They are also possibly formed from burning, do not easily dissolve in water and tend not to migrate. PAHs were found in Landfills 2 and 4. Some, but not all, are carcinogenic. Eight test pits were opened at each landfill, and more sampling is required in the creek and the lake, along with groundwater wells sampling in order to properly access the risk to human health and the environment. With the depth and lateral extent of the landfills determined the next step is to put leachate collection wells in the landfills. Mr. Boudreaux asked for the definition of surface soil and Mr. Suits replied that for this project we used "0 to 6 inches." Mr. Rundell said that basically anything below surface (in the pits) that needed to be sampled (all the way to the 15 foot depth of the pits) is considered sub-soil. Mr. Nussbaum explained that for dioxins, a "Toxicity

Equivalency Factor (TEF)" is calculated that is compared to EPAs toxicity values, to indicate risk to human health. Mr. Nussbaum said landfill caps remedies must be evaluated against the 9 criteria.

5. Mr. Suits introduced Mr. Mike Williams of Jacobs Engineering who discussed activities on the sites at FTA-2, Building 932, Building 747 and Building 700 area. Mr. Williams pointed out the location of the sites on a map of the Base, and explained the activities that occurred on each in the past. At FTA-2, fuels were ignited in aircraft mock-ups to train military personnel in fire-fighting. Unburned fuels collected in the soil are suspected to be floating on the groundwater. At Building 932, fuels were pumped from storage tanks to airplanes as training for Air Force personnel in refueling airplanes. The fuel lines were periodically cleaned and the sludge that was removed was dumped in the sludge pit just east of Building 932. Study of these sites was accomplished using the investigative tool previously described by Bryan Rundell (CPT) in addition to another called "Ultraviolet Fluorescence," in which a small laser is inserted into the borings and the laser light which will cause petroleum products to fluoresce. Some geophysical methods were also used to characterize FTA-2 which indicated "anomalous" areas of special importance to investigate (such as drainage lines and former lagoon). In response to a question, Mr. Williams indicated that pumping of the free-product had not yet begun. Preparations are being made to pump the water from the drainage ditches that are positioned around three sides of the FTA-2.

Mr. Williams said care is exercised during the investigation to not drill too deeply to avoid sending contamination down deeper than it is now. In the heart of some of the most contaminated areas, borings only went down 7, 8 or 9 feet at most. In a few locations, the borings were sent down to 12 feet. Discussion ensued relative to whether three, five or seven mock-ups were on FTA-2. The borings and UV fluorescent laser characterized the subsurface soil and underlying geology and indicated the gravel, clay and sand layers. Sand appeared at about 17 1/2 feet. Higher levels of contamination were found in the areas of the mock-ups. The concrete lined ditches around three sides of FTA-2 is causing the groundwater inside those ditches to mound up higher than outside the ditches. Groundwater flow is believed to be to the southeast.

Mr. Williams reviewed the soil sample data for both surface and subsurface soil. The following contaminants were found: Volatile organic compounds (VOCs), benzene, tetrachloroethylene (TCE -- a solvent), PAHs, dioxins and furans. IEPA and USEPAs screening criteria were used.

Mr. Williams pointed out the features of the Building 932 area on the Base map. There were a number of underground storage tanks (USTs) that held jet fuel for refueling training purposes. A sludge pit east of the building was used to dispose of sludge from cleaning the pipes. The same investigative techniques (as for FTA-2) were used for the 932 sludge pit area. Several different kinds of PAHs were detected at 932 than at FTA-2. SVOCs were also detected. Mr. Williams was urged to summarize quickly (by Mr. Suits and Mr. Boudreaux). A number of geophysical anomalies were detected -- needing more investigation. The investigations have shown where the petroleum-type contamination exists and the direction of groundwater flow at FTA-2, and where the VOCs, PAHs, dioxins, and furans are at both sites. Additional samplings

will be done but basically it appears that some type of removal and/or remediation will be needed at both sites. Mr. Boudreaux questioned whether borings through the parking lot concrete were repaired and Mr. Williams replied they were repaired with asphalt.

Mr. Williams proceeded to discuss Building 747. TCE solvent had previously been detected there in the groundwater at the time of removal of an UST. Jacobs Engineering recently retested and confirmed the original result -- indicating the need for further exploration. Since the TCE is not associated with the petroleum UST, the new effort will attempt to find a source for the TCE so that is can be remediated. As of May 5, 1998 a draft work plan has been sent out to the regulatory agencies for approval so that this work can proceed.

The remediation "pump and treat" system that has been in operation at former Building 700 since August 1996 was turned off as of January 27, 1998. The groundwater is now being evaluated against the State of Illinois "Tier 2" water quality standards to determine if the contaminants have been reduced to an acceptable level.

A Natural Attenuation study has been concluded on the Building 952 oil/water separator overflow site with the conclusion that the site can be closed out under the State of Illinois Tier approach to cleanup corrective action objectives. Close-out will be done using deed restrictions prohibiting residential construction and use of the groundwater (the Village of Rantoul also prohibits the drilling of wells within the city limits). Once a letter is received from the State of Illinois authorizing the conditional close-out, there is a 45-day period to file the close-out papers with the County Recorder's office.

6. Mr. Suits introduced Jeff Villnow of The Environmental Company (TEC) and asked that he present an update on OU-2 of the Base. Since the last RAB meeting, TEC has continued working on their planning documents, the work plans are at the regulatory agencies for review, they have started to respond to comments and they hope to be in the field collecting data by late summer or early fall. Mr. Villnow was applauded for his concise and brief presentation.

7. Mr. Suits then proceeded to give an update on the lead fragments found in Parcel G. He indicated that the current effort would involve finding out more about what the actual material is which might indicate areas in which to search for (and remove) the material. He also indicated there would be a library/museum search to look for photographs taken during times of construction in the past which might offer clues as to the source of the material. Mr. Suits then introduced Mr. Cary Ware whom he had invited here for the purpose of answering any questions that anyone may have on this subject. There were no questions.

8. Mr. Suits briefly discussed the issuance of deeds. No deeds have been recently issued to either the Village of Rantoul or to private developers. One reason for this is that the USEPA had a new concern as to whether the Base groundwater may flow toward Operating Unit 1 (OU-1) from OU-2 thus creating the possibility of transporting contaminated groundwater from OU-1 to OU-2. Mr. Suits asked Mr. Gary Schafer, of the USEPA if he would like to expound upon this. Mr. Schafer indicated that based on old information, the assumption had been that there was no pervasive sand layer or sufficient aquifer that could convey large amounts of groundwater for relatively large distances. Recently Jacobs Engineering has discovered a sand layer that appears to have a greater capability for groundwater to become contaminated and move out of OU-2 than

had originally been thought. The second part of the concern is that the EPA had always assumed that the groundwater in this aquifer was being controlled by the creek (i.e. the creek was the discharge point). He said the chart that Mr. Williams used earlier shows that may not necessarily be true. So combined with some of the data being found with the contamination, it seems there is a greater possibility that contamination could go out of OU-2 perhaps into OU-1. The EPA feels it needs more information regarding this before authorizing the transfer of OU-1 property as clean property. A question was raised regarding which parcels were going to private developers, and Mr. Suits responded V2, V3 and P -- all going to the same developer.

9. Mr. Boudreaux announced the possibility of a new 55,000 square foot addition to one of the factories on Base -- not yet for public release. He said there is a person interested in acquiring a 150,000 square foot warehouse, so the "T" hangar project construction is near beginning. The balloon competition, to be held in August, has 100 balloonists and has gained a lot of new sponsors. Utility preparations are being made to accommodate all the trailers that will be parked in the area. Mr. Boudreaux urged proceeding as rapidly as possible with the OU-2 RI/FS. Mr. Nussbaum pointed out that one of the critical problems for Chanute, given the set backs it has had, is to get funding (which will be largely unavailable after this year) to complete the necessary remedial actions on the Base. Mr. Nussbaum said he is committed to getting the AFBCA Headquarters and Chanute people together and get the money currently available preserved for use by Chanute. Mr. Boudreaux indicated he would work to have the city act in a political manner to help get the funds when and if the timing was right for that. Mr. Nussbaum further explained that there have been set-backs in the Remedial Investigation (RI) because we were trying to get funding, so efforts were therefore diverted. Mr. Boudreaux asked whether the AFCEE obtained the funding and Mr. Suits explained that AFBCA obtains the funding and it is then brought under contract by the AFCEE. Mr. Schafer indicated the USPEA is also encouraging the AFBCA to obtain the funding now so that if Base Realignment and Closure (BRAC) accounts are closed, Chanute will not have a long wait for money and will not have to compete with the active military Bases to get clean-up money. Superfund national priorities list sites have higher priority for cleanup money and so go to the top of the list.

10. The next RAB meeting is scheduled for 7:00 p.m., August 6, 1998 at 1 Aviation Center, Rantoul IL.

11. The meeting was adjourned at 9:07 p.m.

VIRLON J. SUITS
BRAC Environmental Coordinator

Attachment:
Distribution List

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