

N62604.AR.001789
NCBC GULFPORT
5090.3a

LETTER REGARDING HERBICIDE ORANGE SITE CLOSURE NCBC GULFPORT MS
10/25/1990
NCBC GULFPORT

19.1.8.10

HERBICIDE ORANGE SITE CLOSURE

The herbicide orange cleanup effort at CBC Gulfport has been underway for over 15 years. The information presented below does not contain a complete history of the events surrounding this effort.

Herbicide orange was stored at the Naval Construction Battalion Center (CBC), Gulfport, Mississippi, in the open storage area, in 55 gallon drums. See enclosure (1). Many of the drums leaked and contaminated the underlying cement stabilized soil. In 1979, the herbicide orange was burned at sea by the Air Force in cooperation with the Environmental Protection Agency (EPA). The site was identified as a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) site under the Navy's Installation Restoration (IR) program but was not listed on the National Priorities List (NPL). In 1986, contamination was discovered at two additional sites. These sites were added to the original site and included in the proposed cleanup plan.

In 1979, the Air Force, Office of the Assistant Secretary made a commitment to the Navy to return the former herbicide orange storage sites to full and beneficial use. As a result, several research, development and demonstration projects were undertaken to characterize the former herbicide orange area (identify the location and the concentrations of dioxin in the soil) and to determine the cost effectiveness and capabilities of various technologies which could be used to decontaminate the soil. The Air Force studies determined incineration of the soil to be the best method of removing the dioxin from the soil. The entire process was considered a Research and Development (R&D) project to demonstrate the reliability of rotary kiln incineration in removing dioxin from soil. The side benefit of this R&D project was of course the cleanup and return to beneficial use of the site to the Navy. The incineration of the soil began in 1986 and ended in 1988.

To incinerate the soil, the EPA required the Air Force to obtain a Resource Conservation and Recovery Act (RCRA) permit. The RCRA permit was required, at that time, because the sites were not on the NPL and the remedial actions were not funded by CERCLA. The Air Force also felt the RCRA permit would be easier and less costly to obtain. After incineration of the soil, the ash remaining was considered a hazardous waste, because it had been removed from the original site where it was only considered a contaminant. The Air Force was required to submit a delisting petition which would contain scientific evidence proving the ash had been cleaned of all hazardous constituents and should no longer be considered a hazardous waste. If we had been allowed to close the sites under CERCLA, we would only have had to carry out a risk assessment study. This study would have shown that the ash may still be contaminated, but the level of contamination is so low that it would not be considered harmful to people or the environment. The sites could then be returned to beneficial use.

In 1989, the delisting petition was completed and forwarded to EPA Region IV in Atlanta, GA and EPA Headquarters in Washington, D.C. for review and approval. In the summer of 1989, EPA Region IV notified the Air Force that EPA Headquarters was going to deny the delisting petition (unofficially) and that if we pursued it, they would deny the delisting petition (officially). The reason for denying the petition, as stated by EPA, was because some of the ash samples did not pass the Vertical Horizontal Spread/Organic Leachate Model



(VHS/OLM). This model is one of the various tests used to determine if a material is still considered hazardous. The issue of a RCRA versus a CERCLA permit now became the key to continuation of the site closure. Under RCRA, if we cannot delist the ash, we are required to move it from where it is stored and dispose of it in a landfill or apply for a post closure permit to store it on site (forever). Transportation of the ash to a landfill would be very costly (30,000 cubic yards of ash considered hazardous waste). Storing the ash on site would not allow CBC Gulfport beneficial use of the sites. Closing the sites under RCRA would also open the Center to INTENSIVE management of all potential solid waste disposal sites by the EPA. Since under the regulation these sites include any site where a chemical spill may have occurred, the sites could run into the hundreds. Complicating the issue further is the fact that the ash, because of the herbicide orange, is a land ban waste, and it is possible that a landfill could not or would not accept it for landfilling. Needless to say, if any of these were to occur, our efforts to clean up the herbicide orange site and close other abandoned landfill sites on Center would be set back several years.

There is a train of thought that the denial of the delisting petition for CBC Gulfport is connected to the EPA's cleanup of Times Beach, MO. The EPA set the standard for safe dioxin concentrations as anything below 10 parts per trillion (ppt) is considered to be dioxin free. When the standard was set, dioxin could not be measured below this limit. The EPA used this as the "yard stick" in the Times Beach cleanup, stating that Times Beach was "clean" and submitted their own delisting petition to themselves. In our cleanup, we proved that dioxin could be measured below 10 ppt. Because we measured dioxin below the standard, we proved that the EPA standard was incorrect and therefore their cleanup of Times Beach was not carried out correctly. In effect, we have set a new standard for dioxin concentrations in soil. The EPA cannot allow our delisting petition to proceed without denying their own, which puts the EPA on the spot. It is felt by several of us that this is the political reason for not allowing our delisting petition. It is also the reason that the Air Force refuses to withdraw the delisting petition. In a court action, this would work in our favor.

In November 1989, a meeting was held at EPA Region IV in Atlanta to determine if there was some way to salvage the delisting petition. Attendees included representatives from the EPA, Air Force, Southern Division, CBC Gulfport and EG&G, the contractor who operated the incineration process and prepared the delisting petition for the Air Force. The EPA stated they were under extreme political pressure to deny any petition which did not indicate that all contaminants had been removed from the material being tested. As stated above, a few of the soil samples from CBC Gulfport did not pass the VHS/OLM test. During the meeting, the EPA was willing to concede (unofficially) that the hazardous constituents in the ash at CBC Gulfport were in concentrations low enough for the ash to be considered safe. However, the EPA could see no way of keeping the closure out of the RCRA site closure process. A lengthy discussion then ensued over the RCRA versus CERCLA site closure process.



After much haggling, the EPA began to agree with us that this was a CERCLA issue. Mr. Scarbrough (EPA Region IV) stated he had met with Mr. Sam Mabry of the Mississippi Department of Environmental Quality (MSDEQ) prior to our meeting, and MSDEQ would approve closure of the site under CERCLA. However, they would require us to perform additional testing of the groundwater to ensure it was not contaminated. Mr. Scarbrough stated that the EPA would "go along with" any actions taken by MSDEQ, but the Air Force would have to withdraw the delisting petition. The legal officer from the Air Force and the representative from Southern Division objected strongly and stated they would not withdraw the delisting petition and were ready to take the issue to the courts to force the EPA into making a decision. The EPA did not want this because of the political issues discussed above. After further discussion, it was agreed that if the MSDEQ would approve the continuation of the cleanup as a CERCLA action then EPA would also approve the clean up as a CERCLA action. In exchange, the Air Force would consider withdrawing the delisting petition. The Air Force delisting petition would remain at the EPA until such time as an agreement was reached. We all returned to our respective commands and a meeting was scheduled with the MSDEQ.

On 8 January 1990, a meeting was held at MSDEQ and included representatives from MSDEQ, Air Force, CBC Gulfport, Southern Division and EG&G. It quickly became evident that MSDEQ did not agree with the EPA's view that the site could be closed using the CERCLA process. Instead, MSDEQ wanted the Air Force and Navy to continue with the delisting petition via RCRA and stated that a post closure permit would be required for the sites. MSDEQ further stated they wanted to complete the site disposition but could see no way through the regulatory maze to avoid a RCRA post closure permit. MSDEQ then suggested the Air Force and Navy carefully research the regulations to determine if there was a way to keep the HQ site disposition within the CERCLA regulatory realm, however they were not hopeful of finding a way around the regulations. The AF and Navy then told MSDEQ that one strong point for staying within CERCLA was that Defense Environmental Restoration Account (DERA) funds would pay for the clean up under CERCLA. But if we were required to fall under RCRA, additional funds would have to be requested from Congress which could take five years or longer to receive, setting the cleanup back at least five years. All parties wanted to see the cleanup continue, however MSDEQ and EPA were hesitating to make a decision in favor of closing the site under CERCLA. All representatives agreed the meeting was at an impasse and that the problems seemed insurmountable. The Air Force stated they were returning to Washington and would be pursuing the delisting petition through the courts. At this point, the meeting was adjourned and the representatives from the MSDEQ left the conference room. The Air Force and Navy decided that a follow up meeting should be held at Southern Division to determine our next course of action.

On 19 January 1990, the EPA forwarded a letter to the Air force stating the EPA and MSDEQ had held a teleconference (after the Air Force and Navy's



meeting with MSDEQ) during which the problems of the herbicide orange site at CBC, Gulfport were discussed. The EPA and the MSDEQ had decided to let the Air Force continue the site disposition by preparing a risk assessment for the incinerator ash. This in effect allows the Air Force to finish the site closure as a CERCLA site. The risk assessment will determine the risk posed by the ingestion of groundwater impacted by the leachate from the ash, independent of effects from the rest of the site. Instead of proving to the EPA and MSDEQ that there was no hazardous constituent left in the soil, we would only have to show that concentrations were so low, they posed no risk to humans or the environment.

On 2 February 1990, a meeting was held at Southern Division between the Air Force, CBC Gulfport and Southern Division to determine the best response to the situation as it stood. It was agreed that the response to the EPA would come from the Navy and the issues are:

a. The Site - This is a CERCLA issue and a risk assessment and the completion of site cleanup would be carried out under the Navy's CLEAN Contractor (under negotiation at the time of this meeting) paid for by the Air Force. The Air Force would provide the Navy with a description of services of the remaining work.

b. The Ash - The ash is an RCRA issue and a risk assessment as requested in EPA's letter of 19 January 1990 would be developed by the Air Force. The delisting petition would not be withdrawn, the risk assessment would be added to it, and the whole thing viewed as the decision document for the disposition of the ash. This would allow the ash to remain on site, would require no permits and the sites could be returned to beneficial use. The ash would be redistributed back into the holes from which it had been removed.

On 27 March 1990, the Air Force (with the Navy's approval) forwarded a letter to the EPA stating we were in agreement with the EPA letter of 19 January 1990. The Air Force and Navy's plan of action for the studies to close out the herbicide orange site were also included in the letter. In May of this year, the Air Force contractor, EG&G, prepared two draft reports, Soil Sampling and Groundwater Monitoring Plan for CBC Gulfport and a Statement of Work for the CBC Gulfport Site Closure, and forwarded them to the Air Force for review and comment. As of this writing, the plans have not been finalized. We have scheduled a meeting on 1 November 1990 at CBC Gulfport for the Air Force, Southern Division, EPA, MSDEQ, Naval Facilities Engineering Command (FAC 0653) and CBC Gulfport to brief you and the XO on the current status of the sites, determine the next course of action, review the work plan and prepare a plan of action and milestones (POA&M) of the remaining actions. It must be understood by all involved that any actions required by the EPA and MSDEQ will not be influenced by our POA&M.

One other issue which has not been decided is how to return the sites to beneficial use after EPA determines we can use them. The Air Force has stated they will pay to have the Seabees move the ash back to its original location. I believe Captain Lewis was working towards this, but I was not involved in that issue.

