

**To: A. Stanley Meiburg, Acting Regional Administrator, EPA Region 4, Sam Nunn Atlanta Federal Center, 61 Forsyth Street, SW, Atlanta, GA 30303**

From: Reverend Steve Jamison

Maranantha Faith Center

Columbus, Mississippi

RE: Kerr McGee

MDEQ

EPA Region 4

Maranantha Faith Center was impacted by Cresote Contamination in ongoing releases since August 1999. A construction project began by Rev. Jamison in August discovered Creosote in a live stream running through Maranantha Faith Center Property. MDEQ responded and requested that Kerr McGee Columbus sample and provide a report. Kerr McGee sampled, MDEQ sampled and the results did not match. MDEQ informed Kerr McGee that TCLP methodology was not appropriate for determining if Maranantha Faith Center required a clean up. MDEQ requested a clean up plan from Kerr McGee in 2000. Maranantha Faith Center is still waiting for a clean up plan. A groundwater assessment plan was requested from Kerr McGee by EPA Region 4 in 2000 to date no groundwater assessment plan has been presented. There is a major discrepancy between what is in the files and what Kerr McGee aka Tronox and EPA Region 4 can document.

In August 2008 sampling was conducted by Maranantha Faith Center and presented to ATSDR and EPA Region 4 and MDEQ. Maranantha Faith Center property was still being impacted by Kerr McGee Columbus. Cresote was found in the surface water, the sediment on top of the concrete barrier in the ditch and in the soil under the concrete. Analytical data was submitted to MDEQ, EPA Region 4 and ATSDR.

Maranantha Faith Center was advised by EPA Region 4 officials that the Site had been properly addressed and everything was in order. Based on those assurances Rev. Jamison proceeded with his construction project which had already been interrupted by 10 years of Litigation and Environmental Injustice. On June 4, 2009 Rev. Jamison encountered Creosote in the ditch during his efforts to install a concrete culvert. A 911 call resulted in MDEQ sending a representative who collected a sample in a plastic bag. An email to MDEQ resulted in a response of “ we did not collect a sample”. Representatives of MDEQ also failed to notify EPA Region 4 of the Release.

Subsequently EPA Representative Karen Knight arrived after a request was sent to Administrator Lisa Jackson. Ms. Knight arranged for an EPA response team to sample the ditch and move and the contaminated soil already on the ditch banks to roll off boxes. Ms. Knight also pushed through an emergency order requiring Kerr McGee Columbus aka Tronox to present a plan for remediation of Maranatha Faith Center Property which is due at the end of October.

The Kerr McGee aka Tronox site sits less than one half mile away from Maranatha Church Property.

ATSDR presented these findings:

#### **Summary of the Airborne Exposure Conclusions**

Kerr-McGee had two processes that exposed people to airborne contaminants, the pentachlorophenol process and the creosote process. The pentachlorophenol process exposed people to pentachlorophenol and to a much lesser degree to dioxin. The creosote process exposed people to polycyclic aromatic hydrocarbons (PAHs).

Furthermore, African American children appear to be uniquely susceptible to acute exposure effects.

#### **Were people exposed to chemicals in the air from the creosote treatment used by Kerr McGee?**

ATSDR found that:

- Yes, People were exposed to chemicals in the air from the creosote treatment used by Kerr-McGee.
- The creosote treatment also exposed people to Polycyclic Aromatic Hydrocarbons (PAHs).
- PAHs are a group of chemicals

#### **Were people exposed to chemicals in the air from the pentachlorophenol treatment used by Kerr McGee?**

- Yes, People were exposed to chemicals in the air from the pentachlorophenol treatment used by Kerr-McGee.
- The pentachlorophenol treatment also exposed people to small amount of dioxins.
- Dioxins are a group of chemicals made when chlorine, carbon, and oxygen are combined together.

**ATSDR considers the air exposures to creosote, creosote tar solutions, and the insect killer pentachlorophenol to pose no apparent public health hazard. Coming in contact with these contaminants does add to an unacceptable overall risk to the population**

Analytical results for the soil samples indicated the presence of low levels of PAH contamination in one subsurface sample (out of 25 total samples) collected at 8 to 10 feet below ground surface. Because no significant contamination is indicated and because the subsurface depth makes the contamination detected in the one sample inaccessible to most people, these soil samples are dropped from further analysis and discussion in this document. (Sanitation Workers are routinely exposed to soils at these levels.)

Phase IV

Analytical results indicate the presence of PAHs in one sample from the ditch (0.85 ppm BaPEq) and in 2 samples from the impoundment area (up to 8.6 ppm BaPEq). Bis (2-ethylhexyl) phthalate was detected in two samples collected from the ditch (up to 0.8 ppm) and in three samples (up to 5.9 ppm) collected from the impoundment area. None of the bis (2-ethylhexyl) phthalate detections were above the applicable comparison value for the chemical. (No mention of phthalate esters as breakdown products of PAH in sunlight.)

#### b. Ditch Sediments

A completed exposure pathway that existed in the past, and that may continue to the present and future, was exposure to ditch sediments. Residents reported that the ditches occasionally overflowed, causing contamination to move outward from the ditches into surrounding residential yards and properties.

#### b. Groundwater/Private Wells

Past releases from the Kerr-McGee facility have contaminated groundwater at concentrations above applicable health-based comparison levels [7]. The RCRA facility investigation identified that the alluvial and Eutaw aquifers underneath the facility are contaminated with chemicals from the wood-treating operations [57]. While contamination is present in the groundwater beneath the facility, this pathway is incomplete because no one is currently drinking the contaminated groundwater. There is a public drinking water well with 1 mile of the site and no mention of the well pulling the plume was made.

The contaminant plumes are composed of both free creosote product and dissolved constituents. The western free product plume extends from the facility production process area southward toward 7<sup>th</sup> Avenue, and may be present in the vicinity of 23<sup>rd</sup> Street [6]. The eastern free product plume extends from the vicinity of the railcar loading and unloading area toward Moss Street [6]. Groundwater sampling results reveal the presence of creosote constituents such as PAHs and phenols, and xylenes and PCP.

There is significant contamination of groundwater beneath the site. The uppermost alluvial and the Eutaw aquifers underlie the plant site and are contaminated. The Eutaw aquifer is a source of both industrial and domestic water supplies on a regional basis.

#### d. Biota

The Luxapalila Creek, located approximately 0.5 miles east of the site, is the largest perennial drainage in the vicinity of the facility (September 2002). Luxapalila Creek is classified for fish and wildlife support downstream of the facility. Therefore, ATSDR conducted an Exposure Investigation (EI) in June 2008 to determine if fish in the Luxapalila Creek have been impacted by site-related contaminants. Currently we are unable to get ATSDR to release that data.

#### Dioxins

Therefore, it is likely that the level of TCDDs in sediment posed a public health hazard to children who played in the ditch sediment.

Using the same analysis as above, ATSDR compared the adult doses to known toxicological values. The calculated adult doses are approximately 3 to 16 times greater than the LOAEL. Therefore, adults may similarly be at risk from exposure to ditch sediment.

We are currently unable to review this data.

## 5.09.0 Conclusions

1. The Kerr-McGee site is a **past public health hazard**.
4. Currently, the site is an **indeterminate public health hazard**. Residual contamination has not been sufficiently defined in residential or public areas prone to flooding.

### Low Birth Weight Lowndes, Mississippi



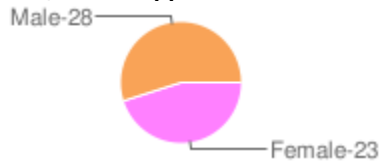
	Female	Male	Total
<b>Black</b>	n/a	n/a	329
<b>White</b>	n/a	n/a	157
<b>Other</b>	n/a	n/a	6
<b>Total</b>	266	226	492

**Low Birth Weight Rate: 106.01 per 1000 Live Births**



2004 data. Low birth weight rates higher than the national rate may be an indicator of an [environmental justice](#) community

### Infant Mortality Lowndes, Mississippi



	Female	Male	Total
<b>Black</b>	n/a	n/a	n/a
<b>White</b>	n/a	n/a	n/a
<b>Other</b>	n/a	n/a	n/a
<b>Total</b>	23	28	51

**Infant Mortality Rate: 10.99 per 1000 Live Births**



Infant mortality rates higher than the national rate may be an indicator of an [environmental justice](#) community.