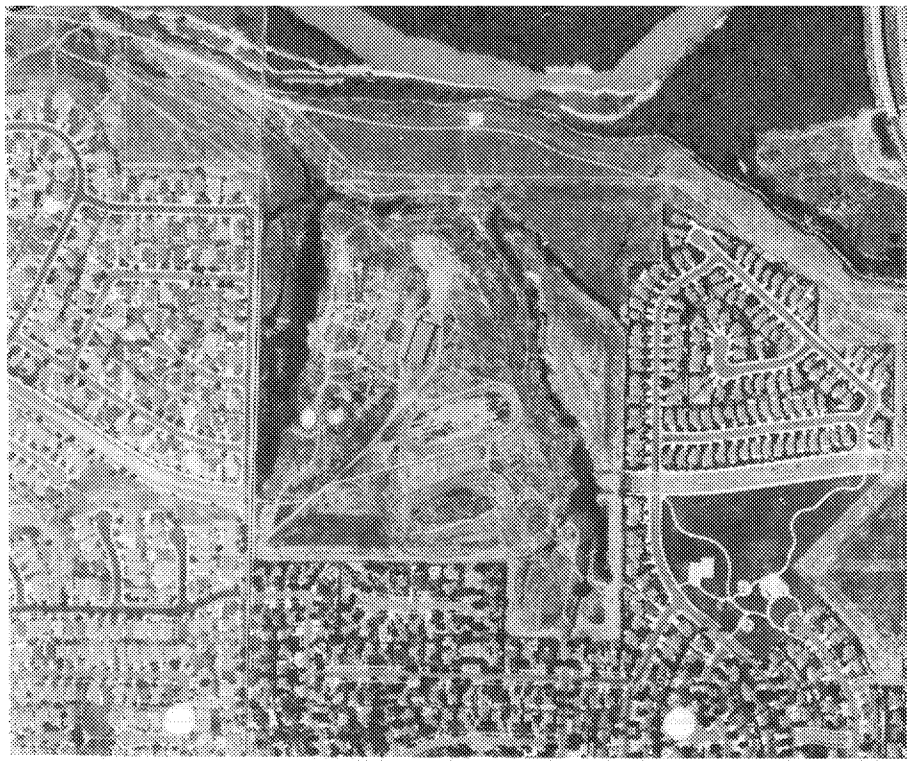

Ag Park - Riverside's Dirty Little Secret.

Deadly Déjà vu … All Over Again!

by Penny Newman

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AUGUST 2016

Dept. of Toxic Substances Control is once again preparing to oversee the cleanup of the Ag Park site. And - once again –ignoring concerns raised by residents at the fence line of this PCB-contaminated site:

Major concerns continue:

- Inadequate air monitoring – not enough monitors around the site; Action Level (point at which action must to taken to stop dust- whether watering the site or shutting down all activity) is too high;
- Inadequate testing and identification of all chemicals of concern (dioxin, furans, perchlorate, etc.)
- Inadequate testing to depth of soil (have only tested "shallow" - 3 feet - areas)
- Inadequate and protective clean up levels at the site; without consulting OEHHA. DTSC is using .22mg/kg while OEHHA has set 0.089mg/kg clean up level for PCBs in soil.
- Inadequate requirements for public disclosure, and
- No testing of residents' yards and homes. DTSC is "modeling to see where they should test! We believe they should test homes adjacent to the site – period.

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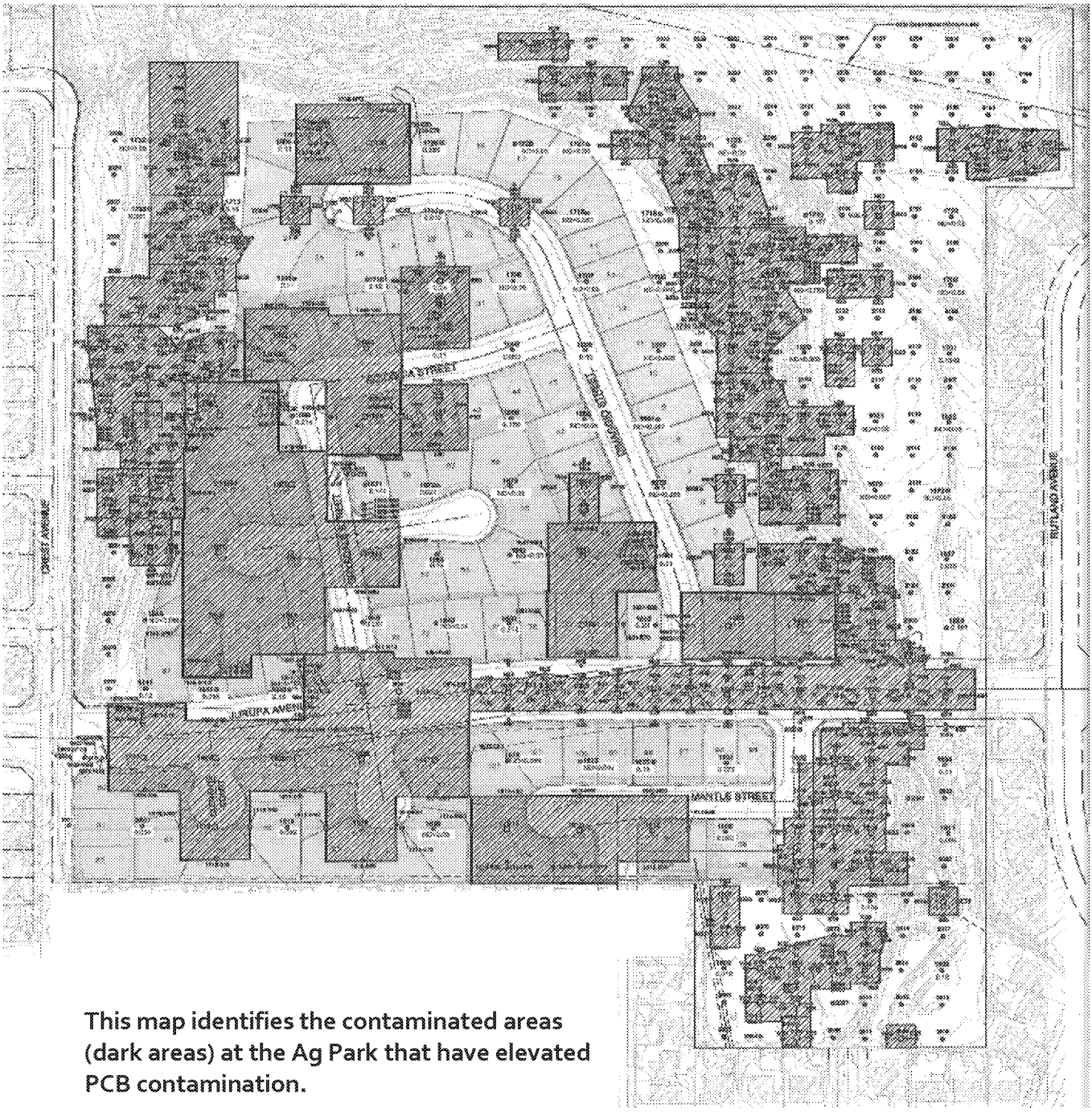

This map identifies the contaminated areas (dark areas) at the Ag Park that have elevated PCB contamination.

Notice the highest levels are near existing homes. Notice also, the white areas directly between the dark areas and homes that have not been tested and are the closest to residents!

Another area of the site left ignored is where the two ravines on each side of the site (and with the highest levels detected) converge near the Santa Ana River. This area is also not tested!

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Background

As you may remember DTSC tried cleaning the site twice before and finally issued a "Letter of No Further Action Required", in April of 2014. This gave the green light to Chuck Cox and Friends of Riverside's Airport to move forward with building homes on the PCB contaminated site.

For the residents living at the fence line of this property that green light meant that once again their concerns for their health and safety were ignored by the city and the agency.

The residents knew the site was not clean! They had watched for 13 years as Chuck Cox violated environmental laws, played fast and loose with the rules and cut corners whenever he could - and that DTSC let him do it. DTSC had not conducted any testing of their own. They only relied on reports presented to them by Mr. Cox.

New Testing

After more than 8 months of prodding, threatening, ridiculing and coaxing we were able to get DTSC to agree to conduct confirmation testing to prove the site had indeed been cleaned up and all the PCBs and other chemicals of concern are removed.

With this poor history from the developer and DTSC staff, we insisted they include "split samples" for EPA test in their lab to ensure accuracy. After conducting the tests, DTSC said everything was fine – but EPA's testing showed elevated levels of PCBs.

This prompted another round of testing, and – Lo and behold - PCB contamination was found throughout the site! Without that testing DTSC would have allowed homes to be built, with children playing in contaminated yards! We were right – they were wrong!

Levels at 131 mg/kg - nearly 600 times higher than the health standard set for PCBs were found throughout the site. As one state representative said, "...it's clear he (the developer) was spreading it throughout the site and filling in the gullies with the contaminated soil...the residents were right."

Déjà vu - DTSC style

You'd think that after being proven wrong DTSC would have welcomed us to the table to help them sort out the next steps. But that's not the case!

DTSC has shut residents out, and discounted their comments and concerns. Since the fall of 2016, DTSC has been conducting testing trying to determine the extent of the contamination and how to clean it up –again. Once again - under this voluntary cleanup - Chuck Cox and his hired consultant will conduct all the work, with "oversight" from DTSC.

As you can imagine, local residents are not confident in the work done by Mr. Cox or DTSC and want to have a say in how the cleanup is designed. They want to ensure that their safety and health will be protected. So far, that assurance has not happened.

AG PARK NOT CLEAN

Levels at 131 mg/kg - nearly 600 times higher than the health standard set for PCBs were found throughout the site. As one state representative said, "...it's clear he (the developer) was spreading it throughout the site and filling in the gullies with the contaminated soil...the residents were right."

Exposure comes from:

Dermal contact – getting soil on your skin

Inhalation – breathing dust from the soil

Ingesting – eating the soil. This can happen by getting soil on your hands and then handling food, or by putting dirt in your mouth as some children do.

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Inadequate Air Monitoring

Action Level was 7 mg/kg in other clean ups

Now using 50 mg/kg before action will be taken to curtail dust

AIR MONITORING DEMANDS

- Lower Action Level (7 mg/kg not 50 mg/kg)
- Industrial Hygienist on site with authority to shut down work
- Monitors around the site not just on two sides
- 24-hour monitoring, not just when work in taking place.
- Testing for chemicals as well as dust.

DUST MONITORING LOG
COX PROPERTIES – AG PARK
RIVERSIDE, CA

DATE	Wind Direction	UPWIND (µg/m³)				DOWNWIND (µg/m³)				Δ	GHAIR
		Tag	Time	Con	Speed	Tag	Time	Con	Speed		
10/23/13	S	51	0721	338.4	1.8	73	0726	152.9	1.0	185.5	FOG.
	SE	51	0820	268.8	1.4	73	0825	141.9	0.9	226.9	FOG.
	SE	51	0920	302.4	0.7	73	0925	115.7	1.4	186.7	FOG.
	SE	51	1020	314.7	1.4	73	1025	123.8	0.5	190.9	FOG.
	SE	51	1120	290.5	4.9	73	1125	130.7	4.5	159.8	FOG.
	SE	51	1220	304.1	2.7	73	1225	139.3	2.4	164.8	FOG.
	SE	51	1320	357.6	1.0	73	1325	162.9	2.9	194.7	FOG.
	SE	51	1420	331.2	5.2	73	1425	131.0	4.3	200.2	FOG.
	SE	51	1454	345.9	4.3	73	1500	154.3	5.0	191.6	FOG.
10/24/13	SE	52	0725	410.4	1.1	76	0729	184.5	1.8	225.9	0700 FOG.
	SE	52	0820	374.1	1.0	76	0825	157.4	1.9	216.7	FOG.
	SE	52	0920	278.4	3.4	76	0925	124.3	2.4	154.1	FOG.
	SE	52	1020	277.9	3.1	76	1025	125.6	3.0	152.3	FOG.
	SE	52	1120	317.5	3.3	76	1125	146.9	3.4	170.6	FOG.
	SE	52	1220	329.1	1.9	76	1225	164.1	4.3	168	FOG.
	SE	52	1322	366.2	2.5	76	1329	140.0	4.0	226.2	FOG.

Highlighted readings are above the 7 mg/kg set as an action level where all work would stop. More than 52 days went by above this safe reading.

After allowing residents to be exposed to PCBs for over 13 years, the proposed work plan provides even less protection! For example in the previous air monitoring plan an action level of 7 mg/kg was set due to the PCB contamination. Even though air monitoring records had readings above **200 mg/kg,** the work was never stopped and water trucks sat unused.

In the current air monitoring plan they plan **to raise the action level to 50 mg/kg** the site. That means that work would not be stopped until dust levels reached 50 mg/kg – dust that contains PCBs and other chemicals! Because PCBs are bio accumulative (they build up in the body) and are persistent (they stay around for a long time) every time residents are exposed is another layer of chemicals in their body.

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Inadequate Air Monitoring - Wind Direction

Ag Park families have been exposed to these chemicals for at least 13 years. Many are already demonstrating health effects consistent with those associated with the chemicals of concern at this site. To subject them to any more is unconscionable.

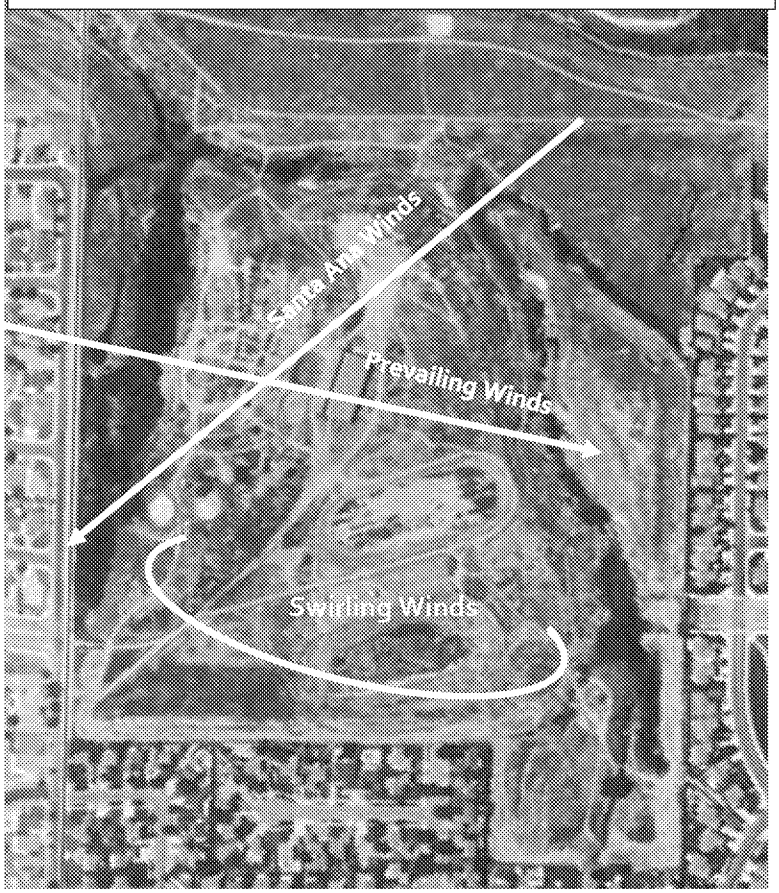
Anyone familiar with the area knows there are swirling winds. DTSC is only recognizing the "prevailing winds" (from west to east) in their air monitoring plan. Their plan calls from 1 monitor up wind and three down wind. This leaves a large segment of residents open to exposure once again.

While the "prevailing winds" go from west to east the Santa Ana Winds blow from the North east to the west. The monitoring records from DTSC's own previous work clearly shows a changing wind direction on an hourly basis.

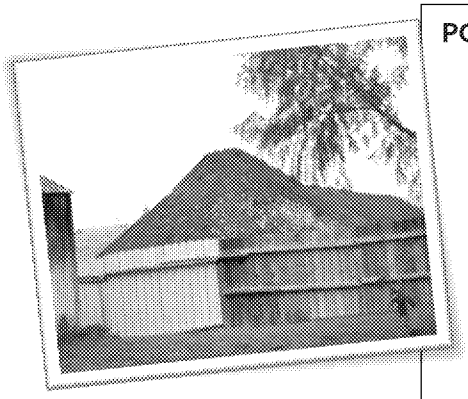
With residents on three sides of the site, we believe the residents deserve to have monitors around the site. We also believe monitors should be capable of not only measuring fugitive dust but also PCBs and other chemicals of concern.

DTSC implies AQMD has approved the air monitoring. AQMD tells us they can only comment on actions that meet their rules. DTSC has designated the site as 50acres instead of the 62 acre site it is. By keeping it as a 50 acre site they are exempt from more restrict requirements and oversight authority by AQMD.

Ag Park wind directions: Prevailing – from east to west; Santa Ana - from North East to South west; Everyday Swirling. DTSC's own air monitoring records showed hourly changes in wind direction!



Residents watched in horror as piles of contaminated dirt were left near their homes for weeks at a time. The dirt blew everywhere. These residents have been exposed before – an added precaution is owe to these families.



PCB Health Effects:

- Causes Cancer (Prop.65 chemical)
- Skins rashes
- Effect the nervous system causing behavior problems
- Immune system disorders
- Reproductive system disorders
- Thyroid function disruption

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Protective Clean Up Levels

DTSC is constantly telling residents that they are not a health agency – they can't explain the health issues. But they are setting the cleanup levels based upon health risk. We want DTSC to consult with health agencies such as Office of Environmental Health Hazard Assessment (OEHHA). A sister agency to DTSC within Cal EPA,"*...provides toxicological consultation to state and local government on possible human health and ecological risks associated with exposures to environment contaminants at sites undergoing regulatory or voluntary cleanup."*

Under OEHHA the California Human Health Screening Levels (CHHSLs) have been set for soil and soil gas levels. CHHSLs are concentrations of chemicals in soil or soil gas below thresholds of concern for risk to human health –that is, an excess lifetime cancer risk of one-in-a-million (10^{-6}) and a hazard quotient of 1 for non-cancer health effects.

OEHHA has set a CHHSL for PCBs at 0.089 mg/kg – more than 2 ½ times lower than the .22 mg/kg proposed by DTSC for the Ag Park Cleanup. If DTSC is not a health agency – then they should listen to one that is! Homes will be built upon this land.

In a recent communication, one DTSC staffer called the CHHSLs " obsolete" and that DTSC no longer recommends using the CHHSLs ...because they have not been routinely reviewed and revised... since 2010". I find this very strange. Over the last few years CCAEJ has worked with OEHHA on several sites including the Wildomar site. DTSC and OEHHA used the CHHSLs to guide their analysis of the level of exposure to homeowners. At no time was the argument used that the CHHSLs were "obsolete". The discussion rose to the level of DTSC's Director as well as their Senior Toxicologists. Many of the discussions took place before the Senate Rules Committee, which has oversight of DTSC and never did they raise the issue that CHHSLs were not current. If DTSC believes the 0.089mg/kg is not appropriate they should do what we have asked be done – bring OEHHA in to consult as the health professionals they are.

DTSC is quick to cite agencies they have talked to but never provide any written information or names of the people they talk to. If they want to demonstrate transparency, DTSC needs to begin having open, honest conversations and the just these sham "Work Group" sessions.

Tables of OEHHA Soil and Soil-Gas Screening Numbers

Table 1. Soil-and-Soil-Gas-Screening Numbers (mg/kg soil) for Nonvolatile Chemicals Based on Total Exposure to Contaminated Soil: Inhalation, Ingestion and Dermal Absorption

Chemical	**Soil Screening Number (mg per kg of dry soil)**	
	Residential Scenario	Commercial/Industrial Scenario
PCBs	~~8.9 E-02~~ **0.089 mg/kg**	3 OE-01

DTSC proposes .22mg/kg clean up level

OEHHA recommends 0.089 mg/kg – 2 1/2 times lower exposure level.

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Clean up All chemicals of concern

DTSC is also not considering the other chemicals found at the site – Chemicals of Concern (COCs). Dioxin, furans, perchlorate and other chemicals are known to be at the site and should be considered in setting the clean-up levels. DTSC has failed to test - especially for Dioxins and furans - which commonly are connected to PCBs.

Why be concerned about these chemicals? Let's just look at Dioxins and Furans as an example.

Dioxins and Furans— Dioxins and furans is the abbreviated or short name for a family of toxic substances that all share a similar chemical structure including seven of the polychlorinated dibenzo dioxins (PCDDs), ten of the polychlorinated dibenzo furans (PCDFs) and twelve of the **polychlorinated biphenyls (PCBs).** (EPA) In 1997 the International Agency for Research on Cancer (IRC) part of the World Health Organization, classified 2,3,7,8, TCDD, the best studied member of the dioxin family, as a known human carcinogen.

Dioxins and furans can enter your body through breathing contaminated air, drinking contaminated water or eating contaminated food. Dioxins and furans can build up in the fatty tissues of animals. Dioxins and furans can cause a number of health effects. People exposed to dioxins and furans have experienced changes in hormone levels. High doses of dioxin have caused a skin disease called chloracne. Animal studies show that animals exposed to dioxins and furans experienced changes in their hormone systems, changes in the development of the fetus, decreased ability to reproduce and suppressed immune system. (EPA)

Chemicals of Concern

Mercury, Arsenic, Chromium, Lead, PCBs, Tetrachloroethane, Toluene, Trichloroethane, Dichlorobenzene, Perchlorate, Thallium, Dioxin and Furans

have been detected at the site

Groundwater – No Remediation

As the map above indicates, PCBs and other chemical contamination has moved off-site and into the Santa Ana River, a domestic drinking water source for Orange County. The groundwater is contaminated with PCBs, perchlorate, total lead, thallium, dioxin and furans per consultant's report.

"Groundwater was estimated to flow north at a rate of 0.023 feet per foot.. " The report continues, *"it should be noted that the groundwater flows directly into the Santa Ana River which is a primary source of drinking water for Orange County; this poses a real threat to degrading the river's water quality."*

But the conclusion in the reports says contaminates from the site won't migrate to the river, and does not mention that the river is a domestic drinking water source.

The river is home to several endangered species as well as a recreation area for the City and surrounding communities.

California has a non-degradation policy for water sources. This means we value our limited water resources and will not allow them to be degraded. DTSC's "Letter of No Further Action" ignores the migration of contaminants into this drinking water source! No remediation is being required to protect our limited water resource. Leaving PCB contamination at the .22 mg/kg level means the contaminated soil can migrate into the Santa Ana River—a domestic drinking water source. Clean up level should be non-detect.

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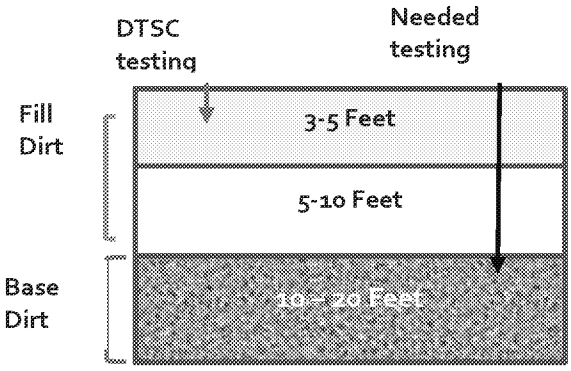
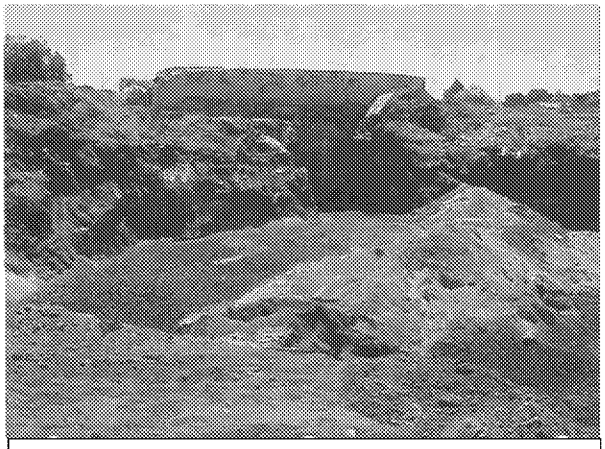
Shallow Testing

DTSC has only conducted "shallow" testing with no definition of what "shallow" means. Why is this a problem?



Some areas of the site have had fill dirt brought in to create the pads for homes. So testing down 3 feet when there is 5 feet of fill makes no sense and certainly won't prove there is no contamination at lower levels. At 6 feet there may be high levels of PCVs and other chemicals. This irresponsible action by DTSC puts families at risk in the future. Testing should be conducted at various depths to ensure all PCBs are below the cleanup level or to non-detect. Since PCBs are manmade and not naturally occurring, they should not be in the soil where homes will be built.



Let's remember how far down the contamination went. PCB contaminated sludge was buried below the 3 foot line that DTSC defines for clean up.

DTSC cannot ensure the safety at this site below the "shallow" levels of testing. At the very least a deed restriction should be placed on the trust deed when homes are sold prohibiting any digging such as planting trees, flower beds, gardens or swimming pools since there is no evidence to show contamination is not present at deeper levels.

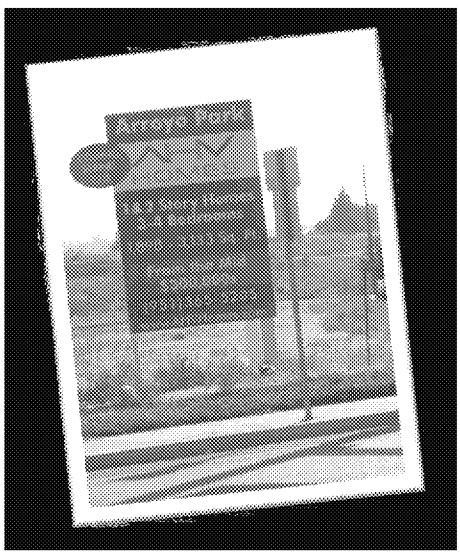
As one DTSC Senior staff member wrote, ***"no data, no evidence – therefore it's clean".***

Full Public Disclosure

Public Disclosure

At the very least, the trust deeds on the homes to be built upon this land must contain a restriction against planting gardens, tress, flower beds – anything that goes deeper than the testing and removal from the site including swimming pool !

In 2002, an additional disclosure law was passed that requires developers and real estate agents to disclosure to home buyers near Defense Sites or Formally Used Defense Site (FUDS).



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What Others Say...

CCAEJ has consulted with a firm that specializes in Brownfield Cleanups around the country (they take contaminated lands and clean them up for reuse). They conducted thousands of cleanups around the country, including in New Jersey which has the largest number of Superfund sites. Their engineers, attorneys and other specialists evaluated the site as if they were considering buying it and here's what they say:

"As noted in the brief we received from our environmental consultant and highlighted in an earlier report, we're concerned that the cleanup plan focuses on PCB mitigation and neglects to address both the additional contaminants of concern and the groundwater. Without doubt, those concerns would be made public record under California's statutory disclosure requirements. Given the consequent cloud on marketability, we would not be able to obtain financing for a project such as this, and even if we could, who in their right mind would buy the homes. We would therefore <u>not</u> be interested in the project."

"we're concerned that the cleanup plan focuses on PCB mitigation and neglects to address both the additional contaminants of concern and the groundwater."

"...who in their right mind would buy the homes? We would therefore <u>not</u> be interested in the project."

They go on to write,

"However, even if you achieve no further action status with the agencies having jurisdiction over the property, the contamination and remediation history of the property would have to be disclosed to the Bureau of Real Estate in any application for Final Subdivision Public Report, in connection with the sale of homes at the site."

"California Business and Professions Code Section 11010(b) (14) and (15) requires that the application for public report include a true statement referencing any soils or geologic report or soils and geologic reports that have been prepared specifically for the subdivision and to provide information regarding the location of the public agency where information concerning soil conditions is available.

Additionally, Section the BRE Rules and Regulations 2792(a)(10) provides that the application for public report should also disclose hazards and other unusual conditions within or in the vicinity of the subdivision. The Subdivision Public Report Application Guidelines clarifies that such disclosures would include, without limitation, "...whether or not the property in or near the subdivision has been used as a toxic and/or solid waste dump site, oil sumps, or for military training purposes" and "any environmental hazards on the subject property should be made known, such as formaldehyde, radon gas, lead-based paint fuel or chemical storage tanks, contaminated soil ...."

Gresham/Savage Attorneys at Law for Tate Goss, President, Viridian Partners

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Testing and Clean-up of Homes

Ag Park Families have long requested that their homes be tested – yards and attics – to ensure they have not been contaminated with the PCBs and other

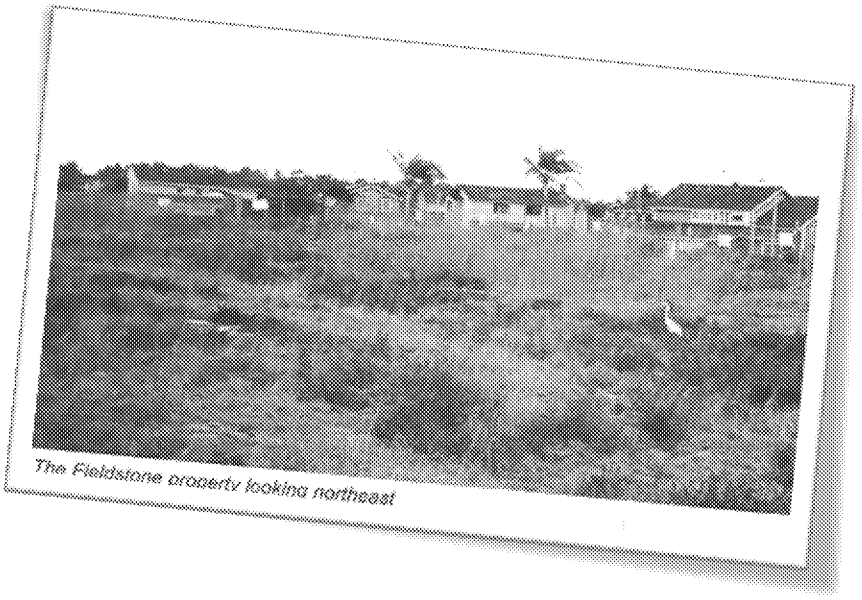
For at least 3 years residents have repeatedly requested this be done only to be met with one excuse after another.

While at other sites testing of homes was completed quickly. For example, at the Fieldstone Property next to Huntington Beach.

The 42-acre site is contaminated with PCBs. It was discovered in June of 2002, and testing of homes began in July of 2002 - **ONE MONTH**! Why the difference?

We understand a DTSC employee with the DTSC Emergency Response Section lived in the development and brought the issue with PCB contamination to the Orange County district Attorney's office.

This is the Fieldstone Property where land was contaminated with PCBs like Ag Park. But unlike Ag Park it only took DTSC 1 month to test homes



The Fieldstone property looking northeast

If that's what it takes - ***WHERE IS RIVERSIDE COUNTY'S DISTRICT ATTORNEY'S OFFICE?***

Comparisons between

Fieldstone Property and Ag Park

SITE	SIZE	CHEMICAL OF CONCERN	HOMES NEAR SITE	YEAR OF DISCOVERY OF SITE	TIME TO TEST HOMES	HIGHEST READINGS	MEDIAN HOUSEHOLD INCOME	ETHNICITY
FIELDSTONE PROPERTY	42 ACRES	PCBS	1 SIDE	JUNE, 2002	1 MONTH	3.220 PPM	$81,389	78% WHITE
AG PARK	62 ACRES	PCBS	3 SIDES	JUNE, 2003	13 YEARS - STILL NO TESTING	4,930 PPM	$47,476	75% LATINO

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Health Effects

PCBs have been demonstrated to cause cancer, as well as a variety of other adverse health effects on the immune system, reproductive system, nervous system, and endocrine system. Studies in animals provide conclusive evidence that PCBs cause cancer. Studies in humans raise further concerns regarding the potential carcinogenicity of PCBs. Taken together, the data strongly suggest that PCBs are probable human carcinogens. Studies of PCB workers found increases in rare liver cancers and malignant melanoma. The presence of cancer in the same target organ (liver) following exposures to PCBs both in animals and in humans and the finding of liver cancers and malignant melanomas across multiple human studies adds weight to the conclusion that PCBs are probable human carcinogens. The International Agency for Research on Cancer (IRC) has declared PCBs to be probably carcinogenic to humans. The National Toxicology Program has stated that it is reasonable to conclude that PCBs are carcinogenic in humans. The National Institute for Occupational Safety and Health has determined that PCBs are a potential occupational carcinogen.

Reproductive Effects

Reproductive effects of PCBs have been studied in a variety of animal species, including Rhesus monkeys, rats, mice and mink. Potentially serious effects on the reproductive system were seen in monkeys and a number of other animal species following exposures to PCB mixtures. Most significantly, PCB exposures were found to reduce the birth weight, conception rates and live birth rates of monkeys and other species and PCB exposure reduced sperm counts in rats. Studies of reproductive effects have also been carried out in human populations exposed to PCBs. Children born to women who worked with PCBs in factories showed decreased birth weight and a significant decrease in gestational age with increasing exposures to PCBs.

Neurological Effects

Proper development of the nervous system is critical for early learning and can have potentially significant implications for the health of individuals throughout their lifetimes. Effects of PCBs on nervous system development have been studied in monkeys and a variety of other animal species. Studies in humans have suggested effects similar to those observed in monkeys exposed to PCBs, including learning deficits and changes in activity associated with exposures to PCBs. The similarity in effects observed in humans and animals provide additional support for the potential neurobehavioral effects of PCBs.

Endocrine Effects

There has been significant discussion and research on the effects of environmental contaminants on the endocrine system ("endocrine disruption"). While the significance of endocrine disruption as a widespread issue in humans and animals is a subject of ongoing study, PCBs have been demonstrated to exert effects on thyroid hormone levels in animals and humans. Thyroid hormone levels are critical for normal growth and development, and alterations in thyroid hormone levels may have significant implications.

It has been shown that PCBs decrease thyroid hormone levels in rodents, and that these decreases have resulted in developmental deficits in the animals, including deficits in hearing. PCB exposures have also been associated with changes in thyroid hormone levels in infants in studies conducted in the Netherlands and Japan.

Other Non-cancer Effects

A variety of other non-cancer effects of PCBs have been reported in animals and humans, including dermal and ocular effects in monkeys and humans, and liver toxicity in rodents. Elevations in blood pressure, serum triglyceride, and serum cholesterol have also been reported with increasing serum levels of PCBs in humans.

In summary, PCBs have been demonstrated to cause a variety of serious health effects. PCBs have been shown to cause cancer and a number of serious non-cancer health effects in animals, including effects on the immune system, reproductive system, nervous system, and endocrine system. Studies in humans provide supportive.

http://www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/effects.htm

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FAST FACTS

- PCBs are polychlorinated biphenyls (polly-KLOR-a-nay-ted by-FEEN-ills). They are a group of chemicals used in electrical transformers and hydraulic fluids.
- PCBs are manmade and are not naturally occurring in the environment.
- PCBs bioaccumulated PCBs are persistent compounds they don't degrade easily.
- PCBs were banned in the 1980s and are considered dangerous enough to be listed specifically in TOSCA law.

Get Involved! Contact your city council member and demand that the site be cleaned up appropriately – completely.

Join neighbors at the Work Group meeting that meet every second Wednesday at a location to be announced soon.

Become a member of the Ag Park Family and have your voice heard! Contact Maria Castor 951-352-3248 or Marilyn Whitney at 951-283-5094.

Become a member and supporter of CCAEJ. Call 951-360-8451

Across our country and throughout the world, people struggle to ensure that the air they breathe, the water they drink, and the land they share, is safe, healthy and protected. For more than 38 years, starting with the Stringfellow Acid Pits, CCAEJ has provided the support and leadership to communities in this struggle.

We are founded on a social justice framework. We recognize that the conditions under which people live are the direct result of the political and economic decision making process. Therefore to improve our living conditions we must bring equity and justice to this system so that the social and political decisions made serve everyone – especially those most vulnerable.

We are a nonprofit organization dedicated to improving both our social conditions, and the natural environment we inhabit so that everyone has a safe, healthy, toxic free place to live, work, learn, and play.

CCAEJ provides:

- *Leadership training and skills development*
- *Programs that share knowledge, build power and community capacity*
- *Projects that improve the natural environment and well being of our families*
- *Media awareness to expose environmental issues*
- *Advocacy for changes in public policy that are community-driven, protective, and that enhance local resources*

C · C · A · E · J

Center for Community Action and Environmental Justice

Centro de Acción Comunitaria y Justicia Ambiental

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