PARENTS AGAINST SANTA SUSANA FIELD LAB

TOWN HALL

WEDNESDAY, AUG 2 | 6:30 PM | ONLINE

Mary Olsen
Gender and Radiation Project

Dr. Robert Dodge
Physicians for Social Responsibility
Los Angeles

Acknowledgements

Parents Against SSFL acknowledges the original inhabitants of the land that the Santa Susana Field Lab encompasses. The 2,850 acres of land that constitutes SSFL has been utilized by the Ventureño Chumash, the Tongva, and Fernandeno Tataviam Band of Mission Indians indigenous communities for time immemorial.

We acknowledge and honor the original inhabitants and seek meaningful partnership and inclusion in the stewardship and protection of their cultural resources and homelands.

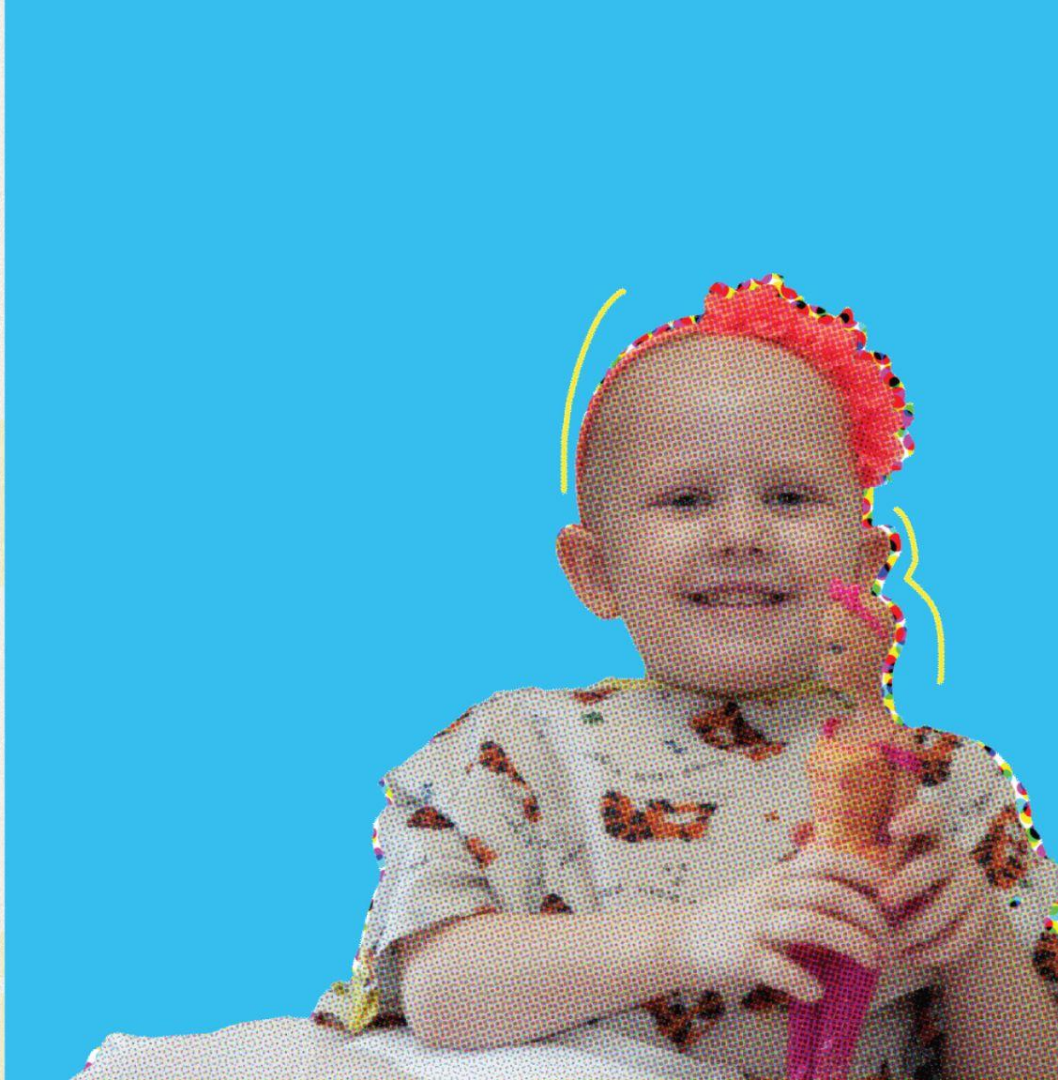
Acknowledgements

Parents Against SSFL wishes to acknowledges the expertise and dedication of **Dan Hirsch**, President of Committee to Bridge the Gap, and **Denise Duffield**, Associate Director of Physicians for Social Responsibility of Los Angeles.

We wouldn’t be here without their tireless advocacy and leadership.

SSFL HEALTH IMPACTS

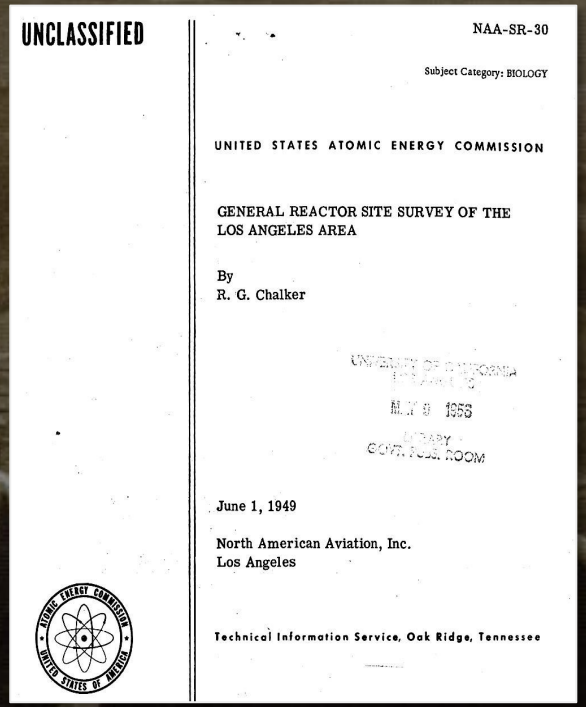
Town Hall : Aug 2, 2023



Santa Susana Field Laboratory

(Formerly known as Rocketdyne)

- Established late 1940s for rocket testing
- In 1949, Atomic Energy Commission looked for a remote nuclear testing lab for work too dangerous to do in populated areas
- SSFL area ranked 5th out of 6 for meteorological safety criteria
- Picked due to driving time to UCLA & USC



UNCLASSIFIED

NAA-SR-30

Subject Category: BIOLOGY

UNITED STATES ATOMIC ENERGY COMMISSION

GENERAL REACTOR SITE SURVEY OF THE LOS ANGELES AREA

By
R. G. Chalker

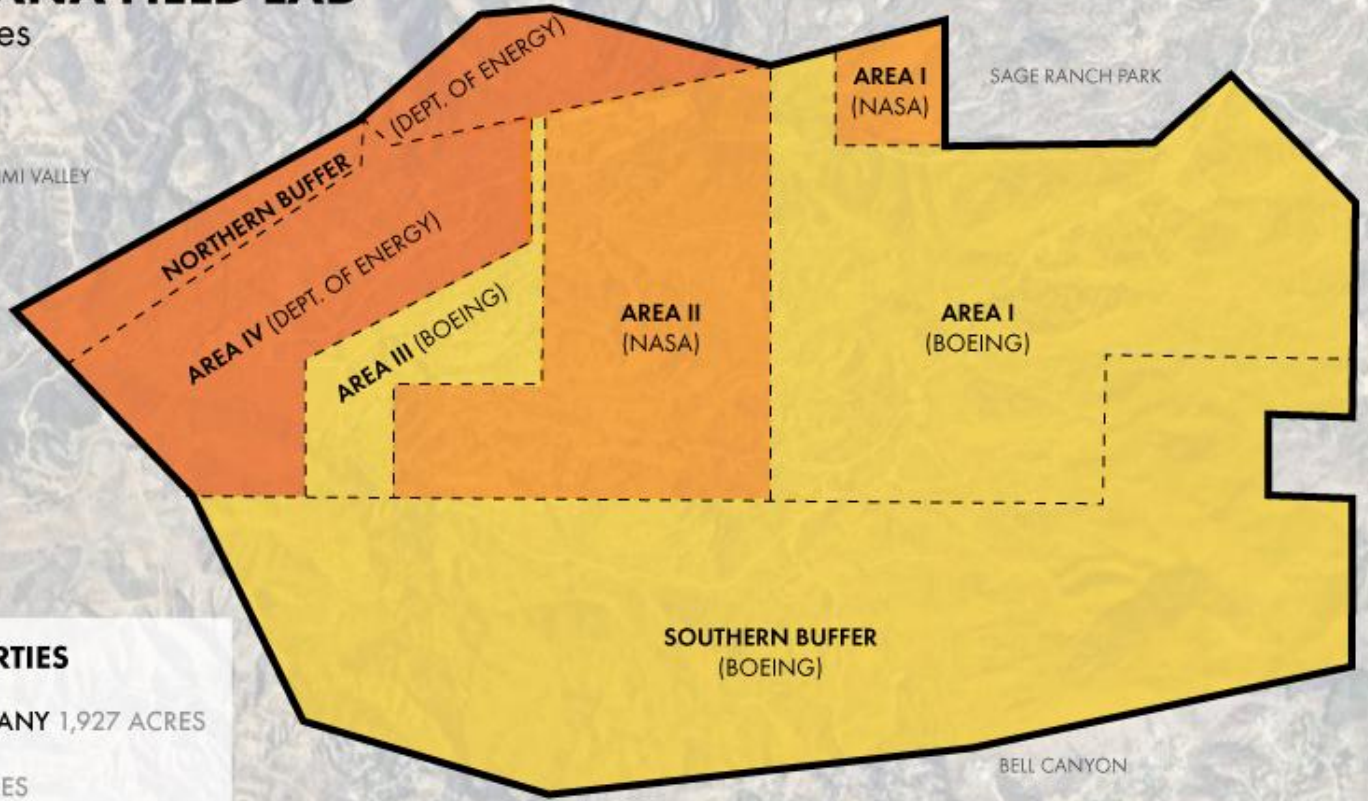
June 1, 1949

North American Aviation, Inc.
Los Angeles

Technical Information Service, Oak Ridge, Tennessee

SANTA SUSANA FIELD LAB

Responsible Parties



RESPONSIBLE PARTIES

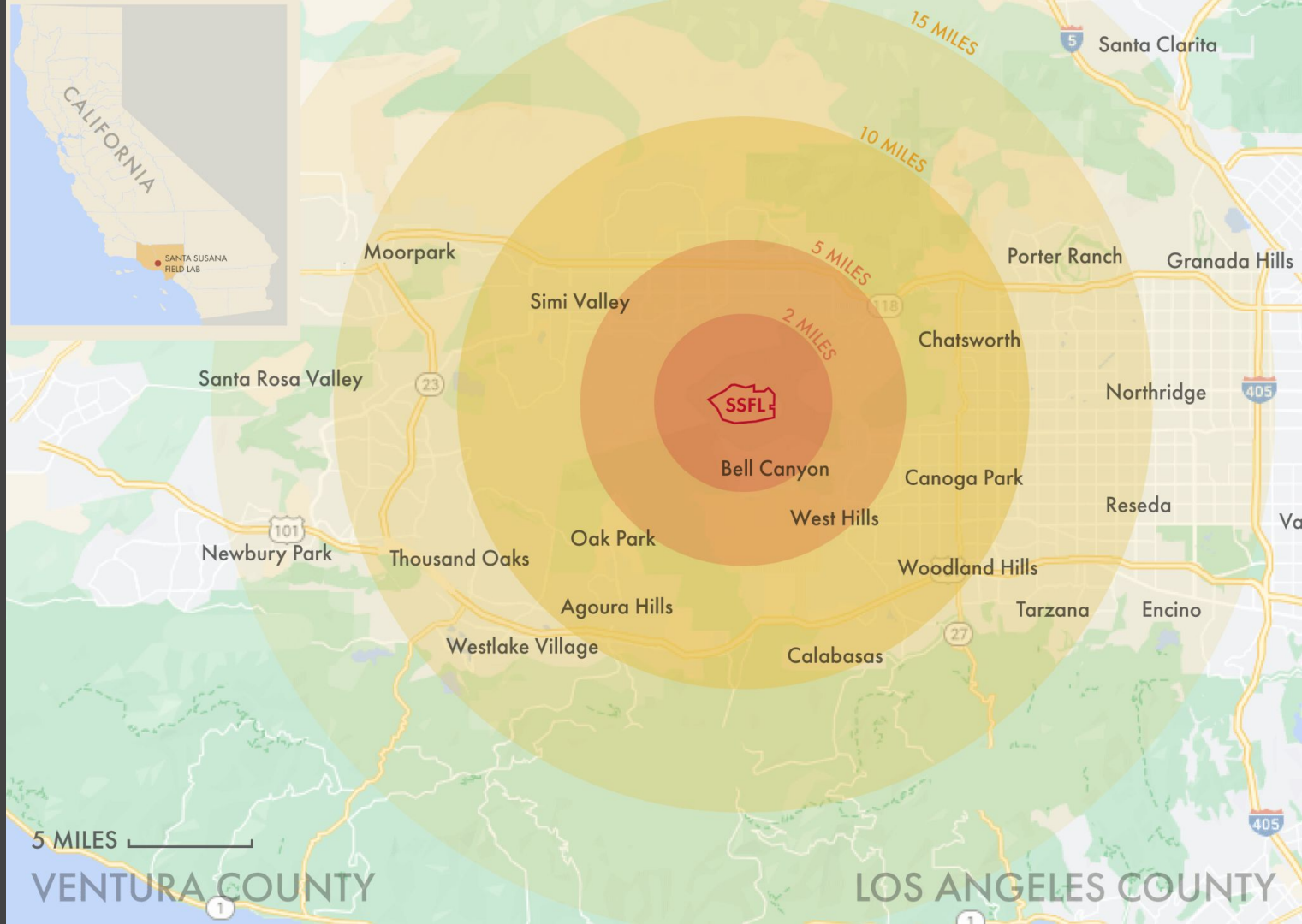
- **BOEING COMPANY** 1,927 ACRES
- **NASA** 451 ACRES
- **DEPT. OF ENERGY** 472 ACRES

Map by Parents Against SSFL | 2023

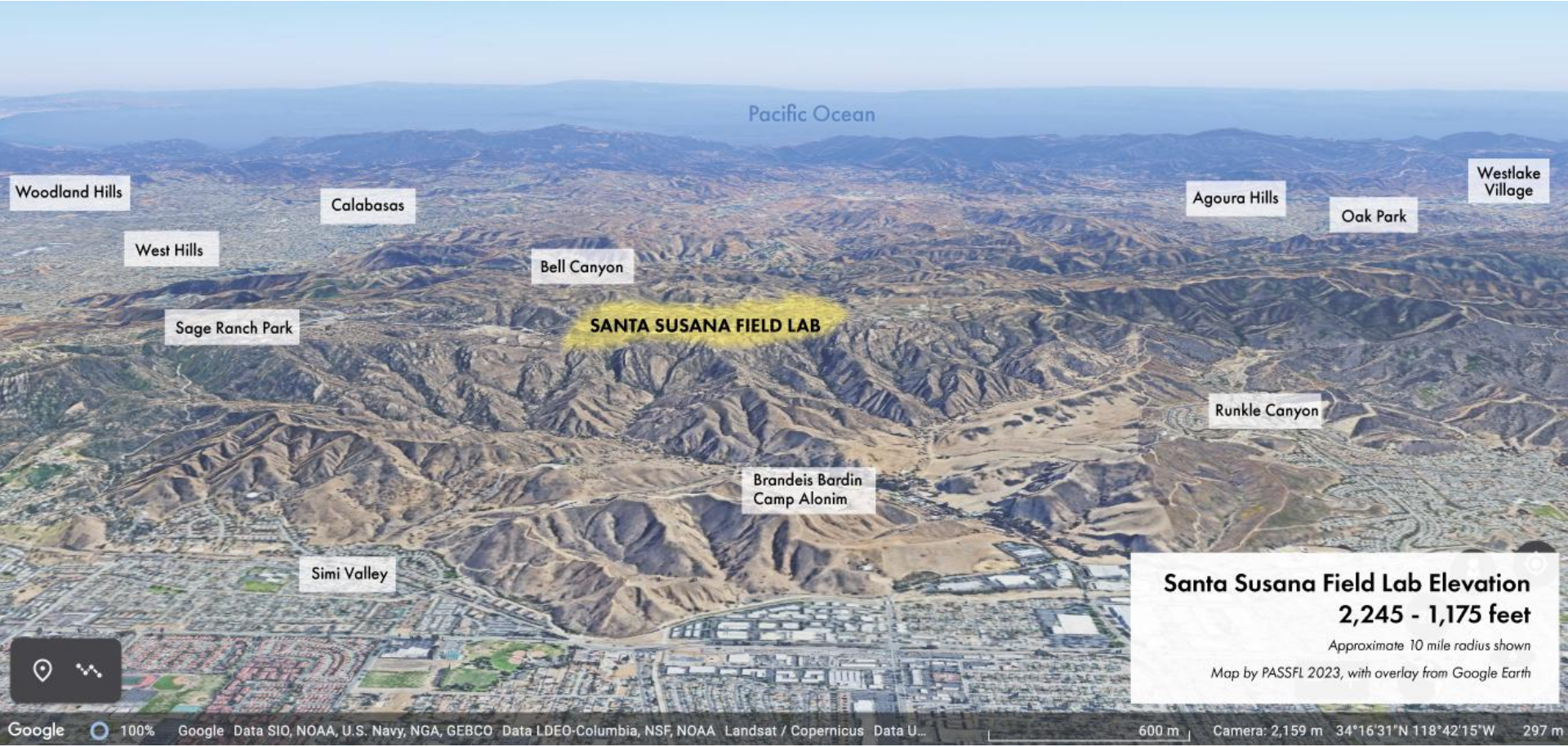
Google

Location:

Over 700,000 people live within 10 miles of the SSFL



Location: Located on Plateau Above Communities



Rocket Engine Testing

Over 30,000 rocket engine tests conducted

800,000 gallons of toxic Trichloroethylene (TCE) was lost into soil

500,000 gallons of TCE remain in SSFL groundwater

Open Air Burn Pits

Burned chemical and radioactive waste at two locations at SSFL

Huge plumes of contaminated smoke spread to local communities

Violated known environmental laws

Nuclear Work in Area IV

10 Nuclear Reactors

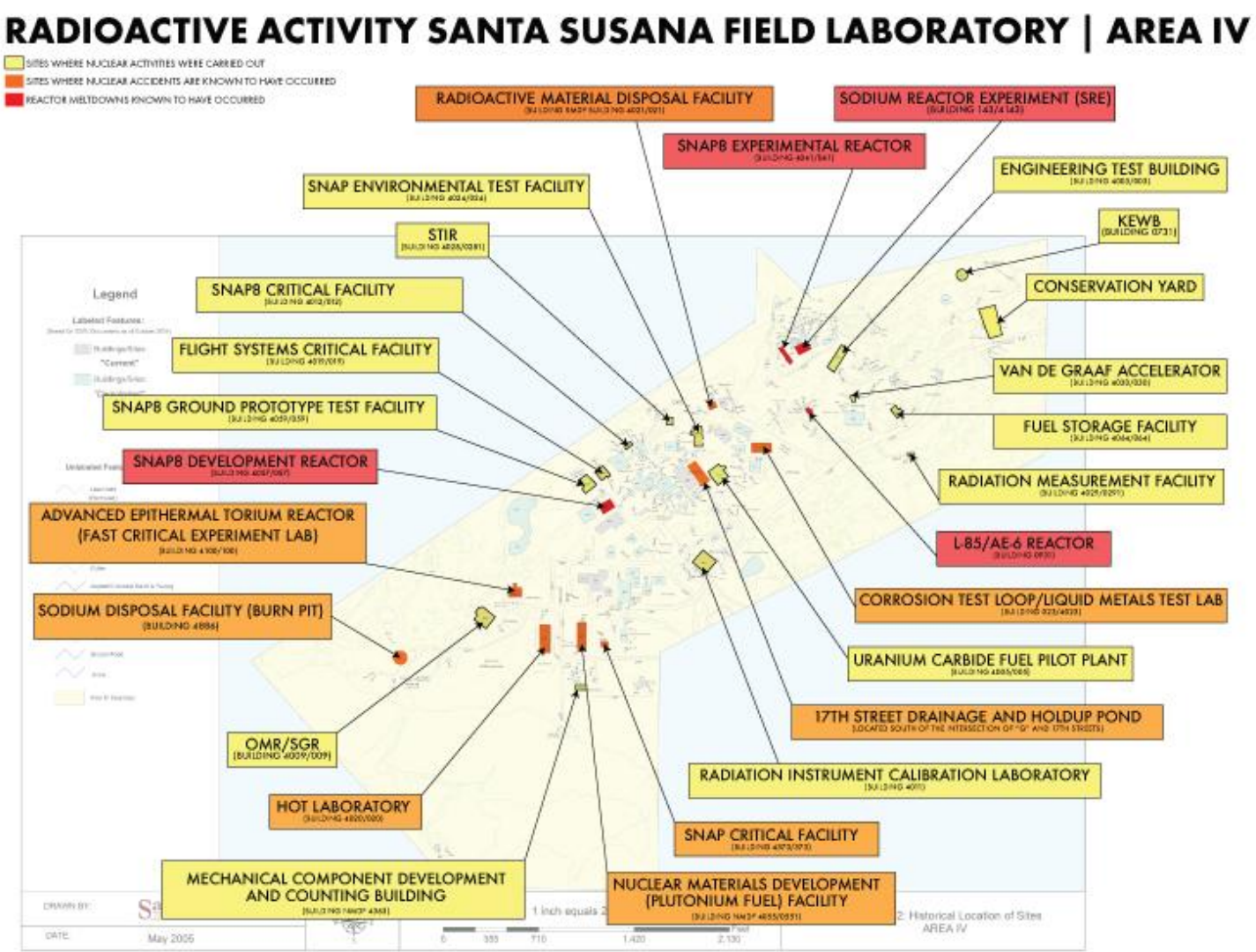
1 Reactor meltdown

3 Reactor accidents

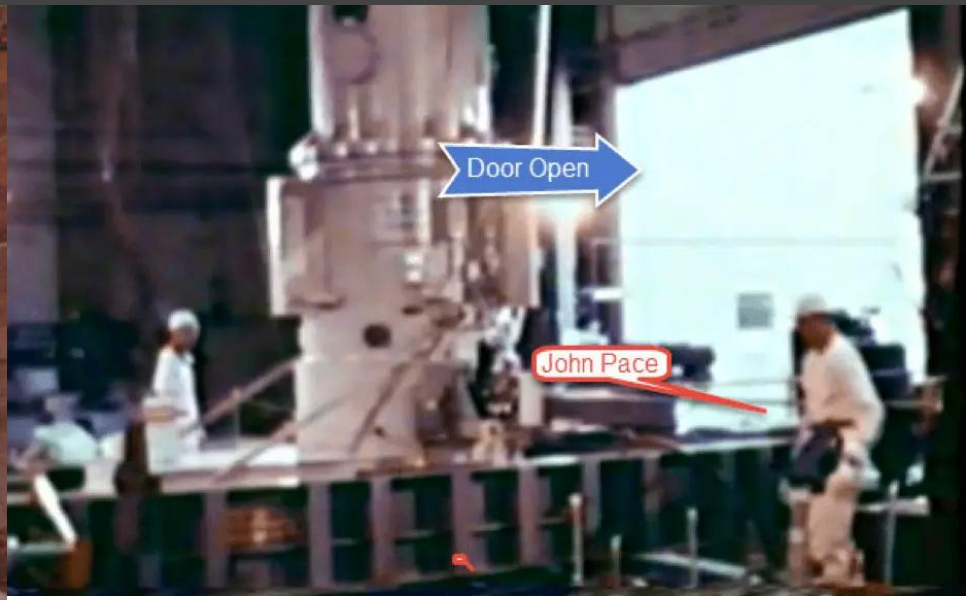
Plutonium and Uranium Fuel Facilities

Area IV had radioactive accidents, explosions, spills, leaks and fires

Open air burn pits



Sodium Reactor Experiment (SRE): 1959



"...13 of 43 fuel elements in the SRE reactor core failed due to overheating when the cooling flow provided by liquid sodium was blocked or partially blocked by tetralin that had leaked into the primary sodium loop during prior power runs..."

An Assessment of Potential Pathways for Release of Gaseous Radiation

Contaminants Migrate Offsite: Soil

Independent study found radioactive contamination after the the Woolsey Fire

APPROXIMATE LOCATIONS OF RADIOACTIVE SAMPLES

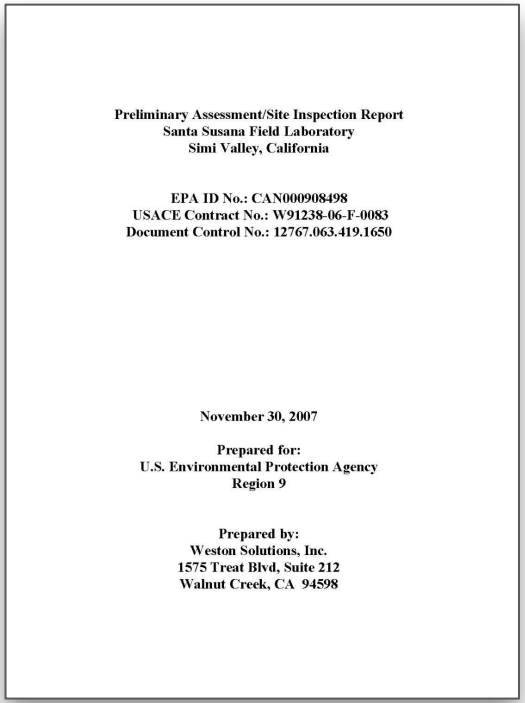
WOOLSEY FIRE SOIL STUDY 2018-2019

www.parentsagainstSSFL.com/Woolsey

Dangerous Chemicals and Heavy Metals Found in RainWater Runoff from SSFL After Woolsey Fire

CONTAMINANT	REGIONAL WATER QUALITY CONTROL BOARD LIMIT	REPORTED EXCEEDANCE VALUE	TIMES ABOVE THE LIMIT
Arsenic	10.0 ug/L	17 ug/L	**1.7 TIMES THE LIMIT**
Copper	14 ug/L	52 ug/L	**4 TIMES THE LIMIT**
Cyanide	9.5 ug/L	15 ug/L	**1.6 TIMES THE LIMIT**
Dioxins	2.8E-08 ug/L	1.7E-07 ug/L	**6 TIMES THE LIMIT**
E. Coli	235 MPN/100mL	5,300 MPN/100mL	**23 TIMES THE LIMIT**
Gross Alpha	15 pCi/L	60.7±14.7 pCi/L	**4 TIMES THE LIMIT**
Iron	0.3 ug/L	98 ug/L	**327 TIMES THE LIMIT**
Lead	5.2 ug/L	88 ug/L	**17 TIMES THE LIMIT**
Manganese	50 ug/L	920 ug/L	**18 TIMES THE LIMIT**
Nickel	86 ug/L	170 ug/L	**2 TIMES THE LIMIT**
Selenium	8.2 ug/L	11 ug/L	**1.3 TIMES THE LIMIT**
Zinc	119 ug/L	430 ug/L	**4 TIMES THE LIMIT**

EPA Finds SSFL Contamination Near to Local Drinking Water Supply in Simi Valley



Preliminary Assessment/Site Inspection Report
Santa Susana Field Laboratory
Simi Valley, California

EPA ID No.: CAN000908498
USACE Contract No.: W91238-06-F-0083
Document Control No.: 12767.063.419.1650

November 30, 2007

Prepared for:
U.S. Environmental Protection Agency
Region 9

Prepared by:
Weston Solutions, Inc.
1575 Treat Blvd, Suite 212
Walnut Creek, CA 94598

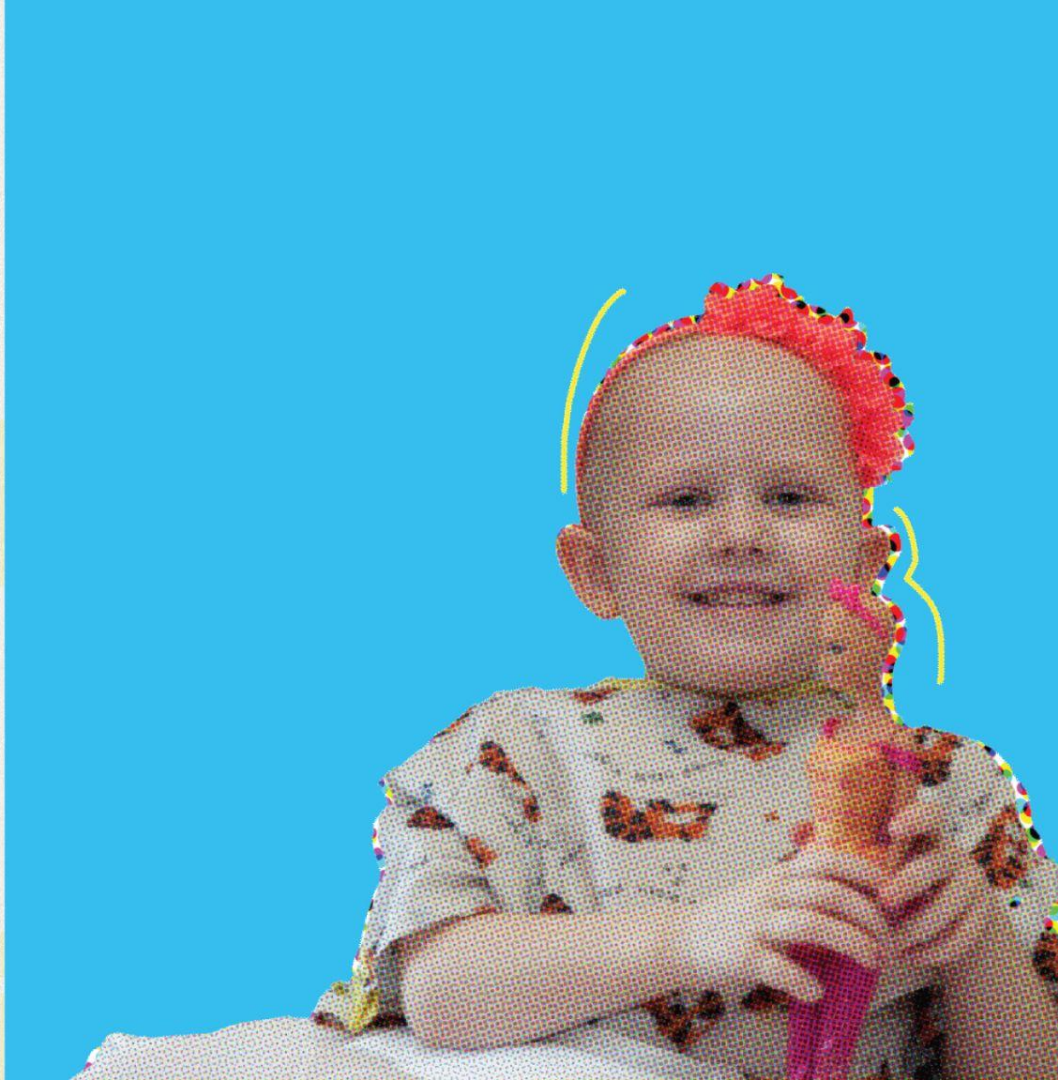
Golden State Water Company operates two municipal drinking water wells (Niles Well and Sycamore Well) that are located between a 3-4 mile radius to the northwest of the SSFL site. ...Although TCE has not been detected in the Golden State Water Company municipal drinking water supply, the above population may be subjected to potential future contamination from the SSFL site. The aforementioned wells [Golden State Water Niles and Sycamore] are located near areas where perchlorate in groundwater resources has been detected at concentrations of up to about 15 ppb.

Preliminary Assessment/Site Inspection Report Santa Susana Field Laboratory, Simi Valley, California. Prepared for: U.S. Environmental Protection Agency Region 9, November 2007. (PDF page 13)

SSFL HEALTH IMPACTS

Local Health Risks

Dr. Robert Dodge
Physicians Social Responsibility - LA



Health Impacts: Radionuclides of Concern at SSFL

Radionuclide	Health/Environmental Effects
Tritium	Linked to developmental problems, reproductive problems, genetic abnormalities.
Radium	Lymphoma, bone cancer, leukemia, aplastic anemia linked with inhalation. Other cancers with external exposure.
Technetium-99	Cancer linked to ingestion (contaminated food and water).
Iodine-131	Linked to thyroid malfunction/cancer. Combines with soil and organic materials easily.
Cesium-137	Can cause cancer 10 – 30 years after ingestion, inhalation, or absorption. Moves easily in environment, difficult to clean up.
Strontium-90	Chemically similar to calcium. Can cause bone cancer, cancer near bones, and leukemia.
Plutonium	Contaminant in dust. Extreme risk of cancers, kidney damage. Can stay in the body for decades.

Health Impacts: Radionuclides Half Life vs Hazardous Life

Half Life:

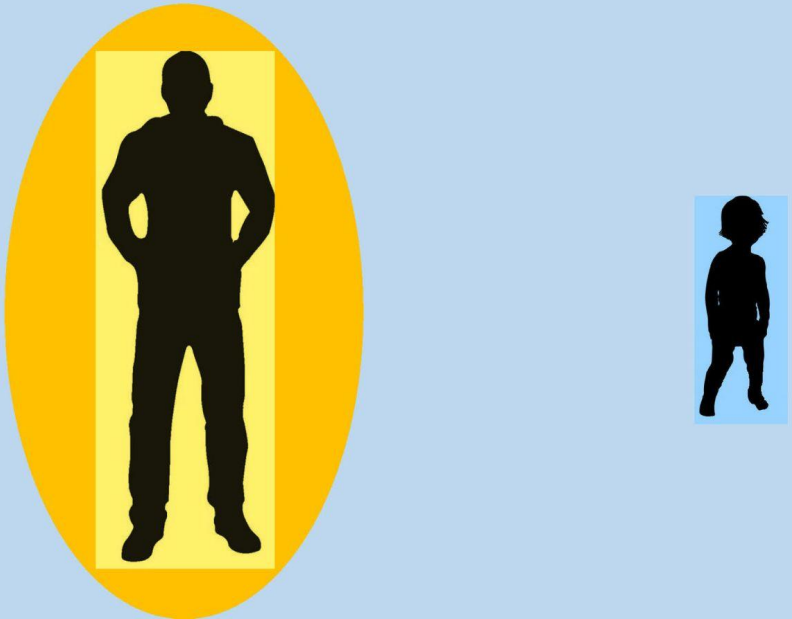
- Strontium 90: 28 years
- Cesium 137: 27 years
- Plutonium 239: 24,000 years

Hazardous Life: (20 half lives)

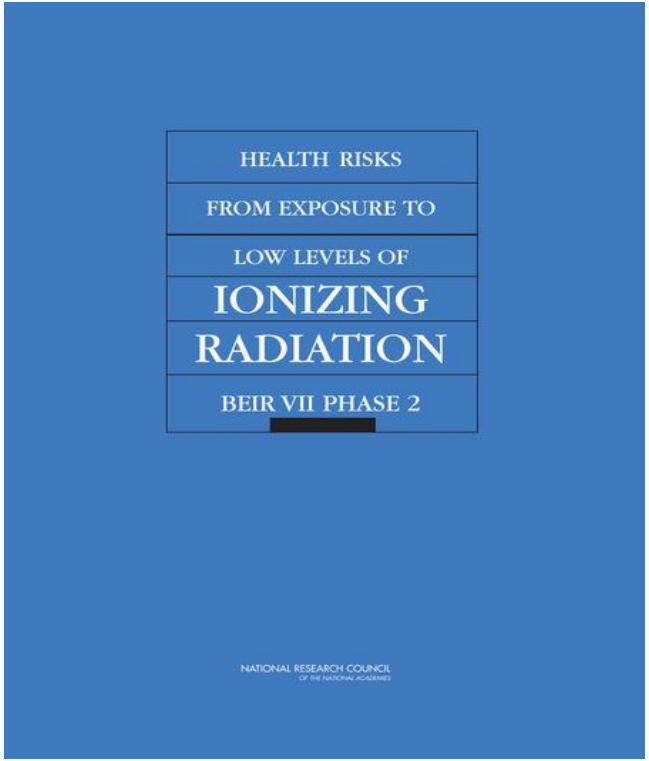
- Strontium 90: 560 years
- Cesium 137: 540 years
- Plutonium 239: 480,000 years

Health Impacts: Radionuclides

Radiation regulation has been based on "Reference Man"



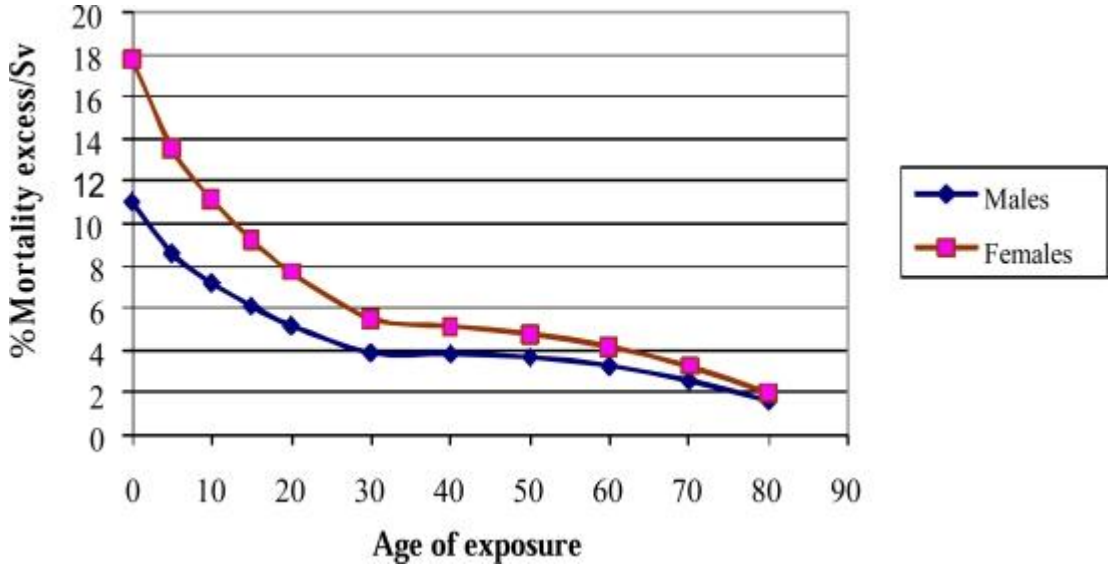
Health Impacts: Radionuclides



No safe level of ionizing radiation exposure. ANY level of exposure increases the risk of cancer in a linear no threshold (LNT) manner.

BEIR VII Report '2006

Health Impacts: Radiation induced cancer induced by age and gender - *BEIR VII*



Cancer and Causation

"We know radiation causes a number of diseases, not just cancer. We know women, children, and pregnancy are more susceptible to damage from radiation. Therefore, in an area where we know radiation exposure was possible or likely, and there are increases in diseases of various types, we don't need to *prove* it was radiation. They need to demonstrate it wasn't."

Cindy Folkers, MS
Radiation & Health Specialist, Beyond Nuclear

Health Impacts: Chemicals of Concern at SSFL

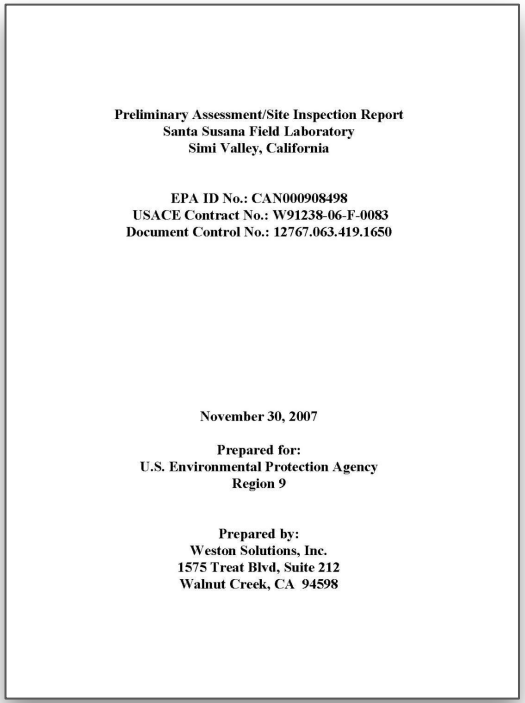
Munitions Development, Chemical Laser Work, and Tests Involving Exotic and Very Toxic Propellants and Rocket Fuels Contaminated the Boeing-owned potion of the Site

Over 300 toxic chemicals have been detected in SSFL soil, groundwater, and/or surface water.

Health Impacts: Chemicals of Concern at SSFL

Chemical	Health/Environmental Effects
TCE	Carcinogenic. Impaired immune system function, damage liver and kidney, impaired fetal development. In larger amounts it may cause impaired heart function, unconsciousness and death
Perchlorate	Interferes with iodide uptake into the thyroid gland, causing hypothyroidism in mothers and negatively impacting proper childhood development such as decreased learning capability.
Dioxins	Carcinogenic and can cause reproductive, developmental, immunological, and endocrine side effects
PCBs	Can cause serious effects on the liver, immune, endocrine, and reproductive are classified as a probable carcinogen
Lead	Linked with learning disabilities, infertility, cancer, and increased risk of heart attacks

Former SSFL Workers Study



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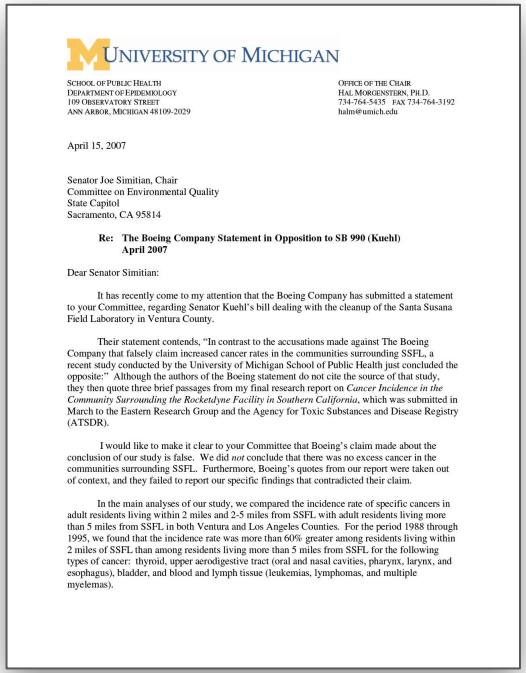
"We found the effect of radiation exposure [to former SSFL workers] was six to eight times greater in our study than extrapolated from the results of the A-bomb survivors study."

Preliminary Assessment/Site Inspection Report Santa Susana Field Laboratory, Simi Valley, California. Prepared for: U.S. Environmental Protection Agency Region 9, November 2007. (PDF page 13)

Federally-Funded Study Found 60% Higher Cancer Incidence Rate of Key Cancers, Associated with Proximity to SSFL



UNIVERSITY OF MICHIGAN

SCHOOL OF PUBLIC HEALTH
DEPARTMENT OF EPIDEMIOLOGY
109 OBSERVATORY STREET
ANN ARBOR, MICHIGAN 48109-2029

OFFICE OF THE CHAIR
HAL MORGENSTERN, PH.D.
734-764-5435 FAX 734-764-3192
halm@umich.edu

April 15, 2007

Senator Joe Simitian, Chair
Committee on Environmental Quality
State Capitol
Sacramento, CA 95814

Re: The Boeing Company Statement in Opposition to SB 990 (Kuehl)
April 2007

Dear Senator Simitian:

It has recently come to my attention that the Boeing Company has submitted a statement to your Committee, regarding Senator Kuehl's bill dealing with the cleanup of the Santa Susana Field Laboratory in Ventura County.

Their statement contends, "In contrast to the accusations made against The Boeing Company that falsely claim increased cancer rates in the communities surrounding SSFL, a recent study conducted by the University of Michigan School of Public Health just concluded the opposite:" Although the authors of the Boeing statement do not cite the source of that study, they then quote three brief passages from my final research report on *Cancer Incidence in the Community Surrounding the Rocketdyne Facility in Southern California*, which was submitted in March to the Eastern Research Group and the Agency for Toxic Substances and Disease Registry (ATSDR).

I would like to make it clear to your Committee that Boeing's claim made about the conclusion of our study is false. We did *not* conclude that there was no excess cancer in the communities surrounding SSFL. Furthermore, Boeing's quotes from our report were taken out of context, and they failed to report our specific findings that contradicted their claim.

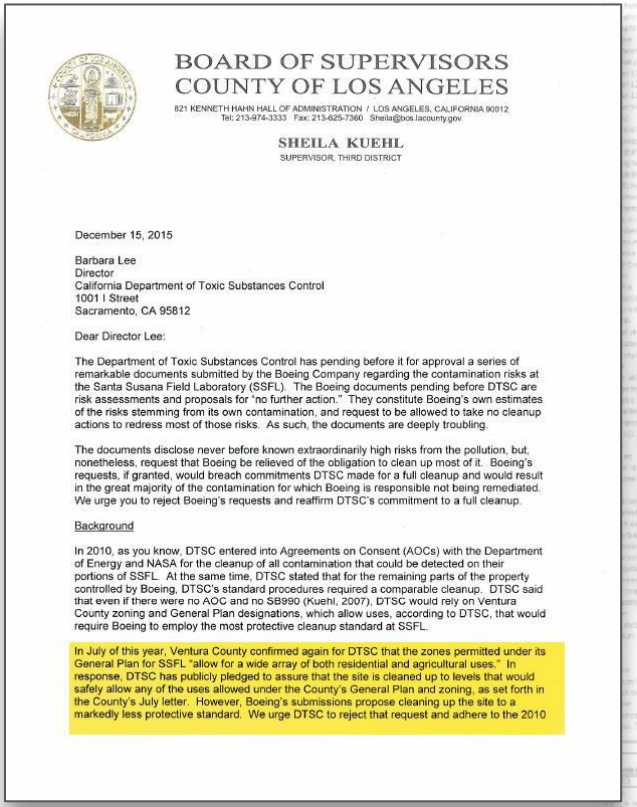
In the main analyses of our study, we compared the incidence rate of specific cancers in adult residents living within 2 miles and 2-5 miles from SSFL with adult residents living more than 5 miles from SSFL in both Ventura and Los Angeles Counties. For the period 1988 through 1995, we found that the incidence rate was more than 60% greater among residents living within 2 miles of SSFL than among residents living more than 5 miles from SSFL for the following types of cancer: thyroid, upper aerodigestive tract (oral and nasal cavities, pharynx, larynx, and esophagus), bladder, and blood and lymph tissue (leukemias, lymphomas, and multiple myelemas).

"For the period 1988 through 1995, we found that the incidence of cancer was more than 60% greater among residents living with 2 miles of SSFL than among residents living more than 5 miles for the following types of cancer: thyroid, upper aerodigestive tract, bladder, and blood and lymph tissue."

Professor Hal Morgenstern

https://www.ssflworkgroup.org/files/LettertoSen.Simitian_041507.pdf

RFI Study finds 9 in 10 people would get cancer



BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

821 KENNETH HAHN HALL OF ADMINISTRATION / LOS ANGELES, CALIFORNIA 90012
Tel: 213-974-3333 Fax: 213-625-7360 Sheila@bos.lacounty.gov

SHEILA KUEHL
SUPERVISOR, THIRD DISTRICT

December 15, 2015

Barbara Lee
Director
California Department of Toxic Substances Control
1001 I Street
Sacramento, CA 95812

Dear Director Lee:

The Department of Toxic Substances Control has pending before it for approval a series of remarkable documents submitted by the Boeing Company regarding the contamination risks at the Santa Susana Field Laboratory (SSFL). The Boeing documents pending before DTSC are risk assessments and proposals for "no further action." They constitute Boeing's own estimates of the risks stemming from its own contamination, and request to be allowed to take no cleanup actions to redress most of those risks. As such, the documents are deeply troubling.

The documents disclose never before known extraordinarily high risks from the pollution, but, nonetheless, request that Boeing be relieved of the obligation to clean up most of it. Boeing's requests, if granted, would breach commitments DTSC made for a full cleanup and would result in the great majority of the contamination for which Boeing is responsible not being remediated. We urge you to reject Boeing's requests and reaffirm DTSC's commitment to a full cleanup.

Background

In 2010, as you know, DTSC entered into Agreements on Consent (AOCs) with the Department of Energy and NASA for the cleanup of all contamination that could be detected on their portions of SSFL. At the same time, DTSC stated that for the remaining parts of the property controlled by Boeing, DTSC's standard procedures required a comparable cleanup. DTSC said that even if there were no AOC and no SB990 (Kuehl, 2007), DTSC would rely on Ventura County zoning and General Plan designations, which allow uses, according to DTSC, that would require Boeing to employ the most protective cleanup standard at SSFL.

In July of this year, Ventura County confirmed again for DTSC that the zones permitted under its General Plan for SSFL "allow for a wide array of both residential and agricultural uses." In response, DTSC has publicly pledged to assure that the site is cleaned up to levels that would safely allow any of the uses allowed under the County's General Plan and zoning, as set forth in the County's July letter. However, Boeing's submissions propose cleaning up the site to a markedly less protective standard. We urge DTSC to reject that request and adhere to the 2010

"...Buried thousands of pages into Boeing's documents are the company's **estimates of the cancer risk from the toxic pollution.**"

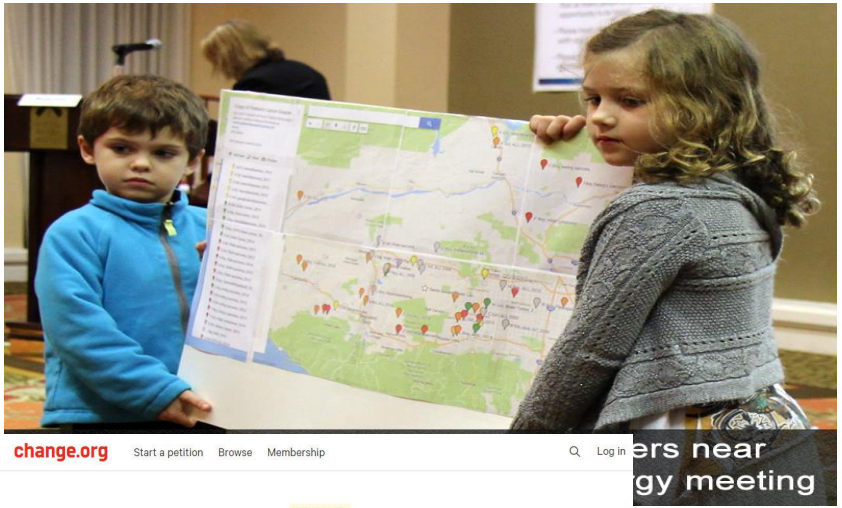
Suburban Residential Garden Exposure Scenario

Carcinogenic			Noncarcinogenic		
RBSL[a] (mg/kg)	Cancer Risk	Percent Contribution	RBSL[a] (mg/kg)	Hazard Quotient	Percent Contribution
--	--	--	5.38E+01	1.68E+00	0.2%
Total Risk	**9.6E-01**	100.0%	**Hazard Index**	**727**	100.0%

In 2015 Boeing buried RFI studies that showed in some areas of Boeing's SSFL property, 96 out of 100 (9.6E-01) people would get cancer if they lived there.

Draft RCRA Facility Investigation Data Summary

Contamination Concerns: Pediatric Cancer Clusters



change.org Start a petition Browse Membership Log in

1 RESPONSE

No more kids with cancer: clean up the Santa Susana Field Lab

526,557 have signed. Let's get to 1,000,000!

Lydia Carlson signed 11 minutes ago

Chris Woodrum signed 13 minutes ago

First name

Last name

Email


IN THIS FAMILY
NOBODY FIGHTS ALONE
I had brain surgery
991 Charter Founders

High Rates Breast Cancer in East Ventura County/West Los Angeles

Niki
Yes. I was recently diagnosed in May with DCIS. I have l
in the past year be diagnosed and 3 that have to get bi
month. I am 47
Like Reply 1h

Jessica
I was just diag
raised in cam
Like Reply

Jessica
It's wild fire ri
picked up by
Like Reply

Sofia
I have been a
I can't recall if
But during lat
with Leukemia
Like Reply

Erica
There's been
rocketdyne.
Or so many b
Like Reply

Alysia
In Simi Valley,
cancer in the same breast at same time
Like Reply 3m

Linda
My daughter had stage 4 breast cancer and passed . We'
neighbor that have cancer mid simi
Care Reply 1d

hor Top contributor
o sorry to hear about your daug

ana Field Lab Nuclear Disaste
ny this is.

k.

verage" age for bre
ue anymore. So ma
and 40's. Somethi

the surrounding c

Sarah
I'm 48 which I consider still young and have c
it's definitely environmental related with increa

Jennifer
Yep. I'm 51 and I have breast cancer. Thank God, I caught it early. Just had my last treatment last Friday.
Like Reply 23h 5

Melissa Bumstead Author Top contributor
Jennifer English Groff I'm SO thankful you caught it early. Way to kick cancer's butt.
Like Reply 3h

Jennifer
Melissa Bumstead , thank you. What really sucked was, cancer doesn't run in my family. So let's say I was a little upset when I found out.

Kim
Simi in general seems to be a cancer cluster. A lot of people blame the rocketdyne thing. Breast, brain, colon and leukemia are the most common types there.
Like Reply 19h

Courteney
Yes, women I went to school with had it in their 20s and 30s.
Like Reply 1d

Whitney
Me for one diagnosed at 35... My MIL died at 65 after 10 years of stage 4 breast cancer.
Like Reply 1d

Lisa
Yes
Like Reply 1d

Michelle
My mom passed at 55

Radiation: No Safe Level of Exposure

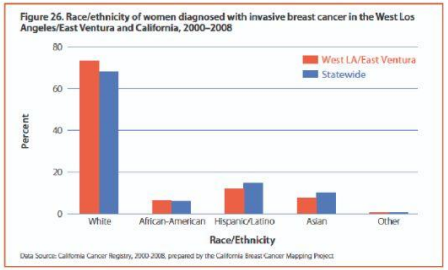
"It is widely known that ionizing radiation - radioactivity powerful enough to strip electrons from atoms, break chemical bonds of molecules, and even break chromosomes - can be extremely harmful to humans. Even at low levels, ionizing radiation has the potential to cause DNA damage resulting in an uncontrolled division of abnormal cells, or what is commonly known as cancer."

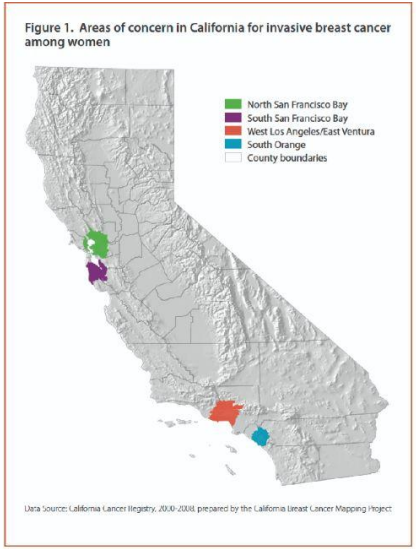
https://www.genderandradiation.org/basics

High Rates Breast Cancer in East Ventura County/West Los Angeles

"Our analysis identified four distinct areas in CA with invasive breast cancer rates that were between 10% – 20% higher than the statewide rate… We now see that an area partially overlapping each of these [Ventura and Los Angeles] counties possesses a consistently elevated [invasive breast cancer] rate…"

Because of its relatively small population, Ventura County has never been noted to have consistently elevated rates of invasive breast cancer on an annual basis relative to the state overall."





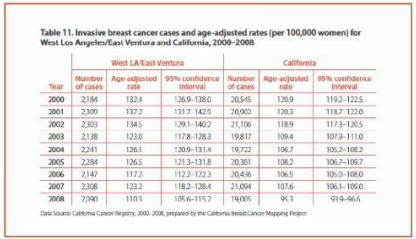
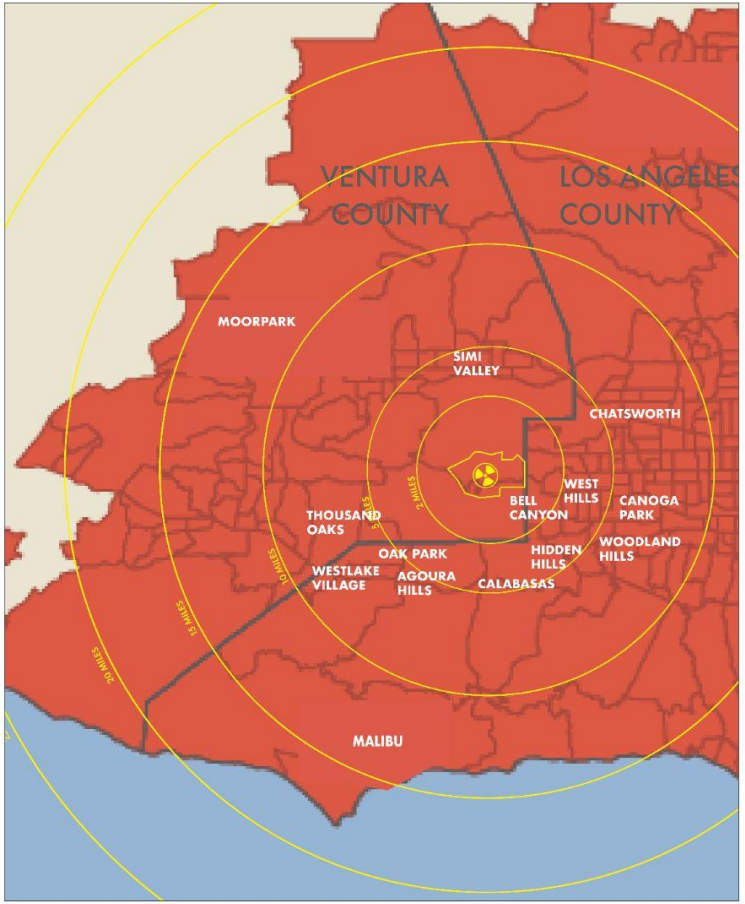


Table 11. Invasive breast cancer cases and age-adjusted rates (per 100,000 women) for West Los Angeles/East Ventura and California, 2000–2008

	West LA/East Ventura			California		
Year	Number of cases	Age-adjusted rate	95% confidence interval	Number of cases	Age-adjusted rate	95% confidence interval
2000	2,184	132.4	126.9–138.0	20,545	120.9	119.2–122.5
2001	2,309	137.2	131.7–142.9	20,002	120.3	118.7–122.0
2002	2,303	134.5	129.1–140.2	21,106	118.9	117.3–120.5
2003	2,138	123.0	117.8–128.3	19,817	109.4	107.9–111.0
2004	2,241	126.1	120.9–131.4	19,722	106.7	105.2–108.2
2005	2,284	126.5	121.3–131.8	20,381	108.2	106.7–109.7
2006	2,147	117.7	112.7–122.3	20,436	106.5	105.0–108.0
2007	2,308	123.2	118.2–128.4	21,094	107.6	106.1–109.0
2008	2,290	110.3	105.6–115.2	19,005	95.3	93.9–96.6

Data Source: California Cancer Registry, 2000–2008, prepared by the California Breast Cancer Mapping Project

Age-adjusted rates of female invasive breast cancer declined from 2000 to 2008, but were steadily higher in the West Los Angeles/East Ventura area of concern compared to statewide.

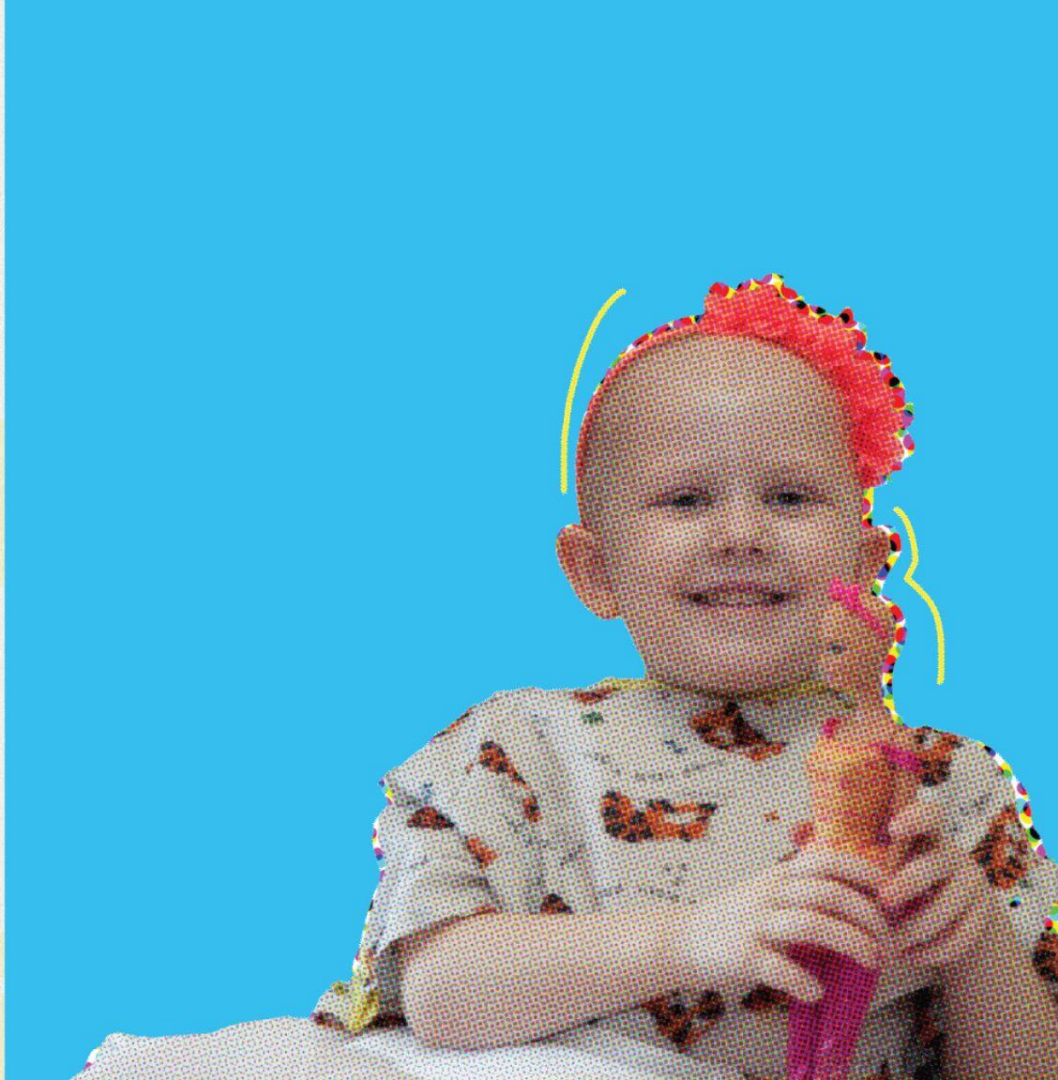


https://trackingcalifornia.org/breast-cancer-mapping/breast-cancer-mapping-landing

SSFL HEALTH IMPACTS

Women & Children

Mary Olson
Gender and Radiation Impact Project



GENDER + RADIATION IMPACT PROJECT

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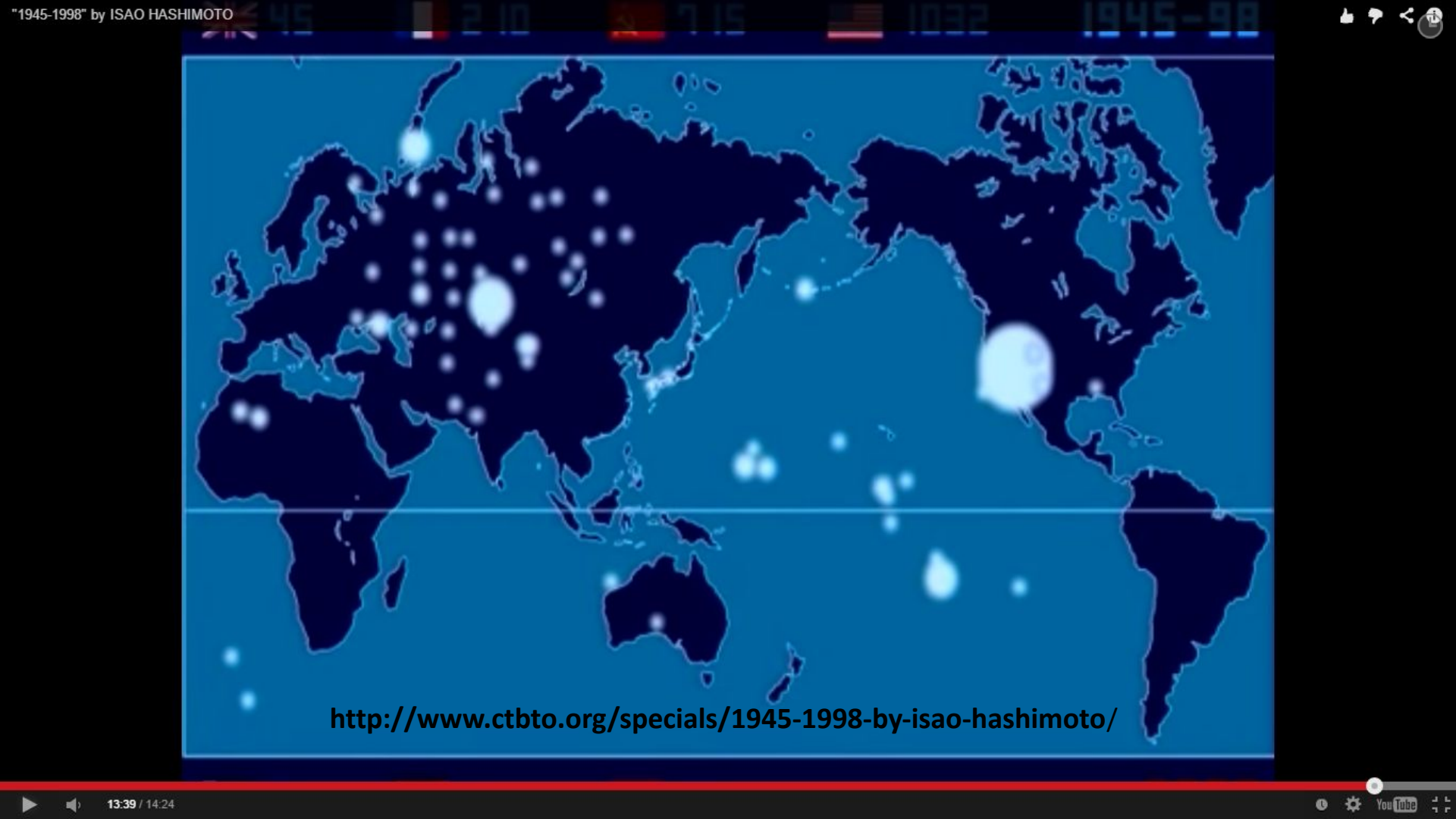
Mary Olson, Gender and Radiation Impact Project

Asheville, North Carolina USA

www.genderandradition.org


"1945-1998" by ISAO HASHIMOTO
http://www.ctbto.org/specials/1945-1998-by-isao-hashimoto/
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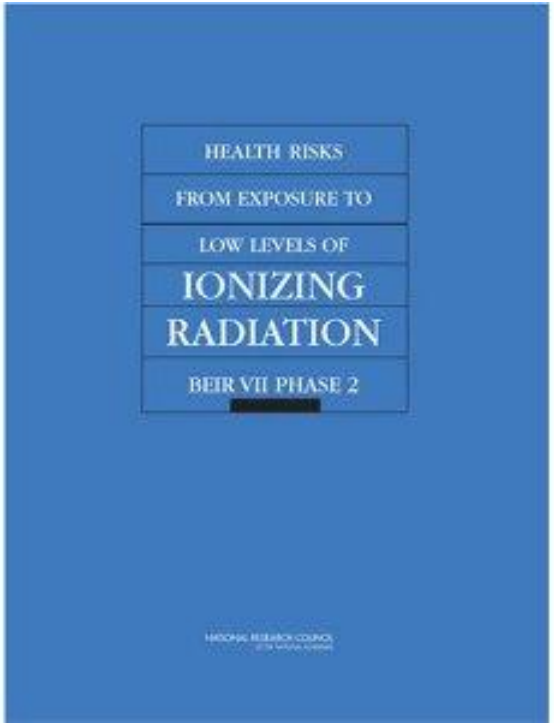


U.S. National Academy of Science:
Biological Effects of Ionizing Radiation (BEIR VII Phase 2) published 2006. Sixty years of Life Span Study (LSS)

Gender and Radiation Impact Project (GRIP)

For citation for points made in these slides, visit:

Disproportionate Impact of Radiation and Radiation Regulation

INTERDISCIPLINARY SCIENCE REVIEW, 26 May, 2019
https://www.tandfonline.com/doi/full/10.1080/03080188.2019.1603864 or contact the author.

Gender and Radiation Impact Project (GRIP)

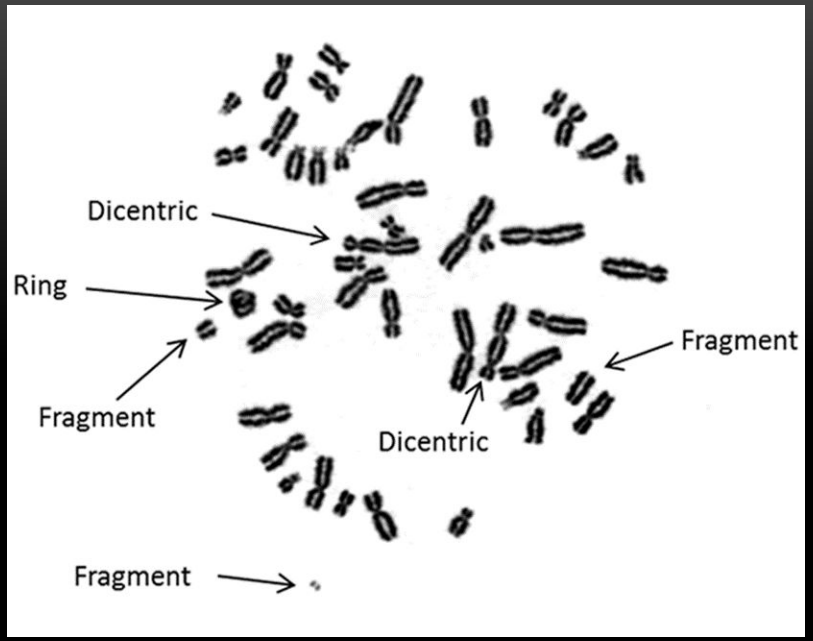
- Communicate key finding:

biological sex is a factor in ionizing radiation harm

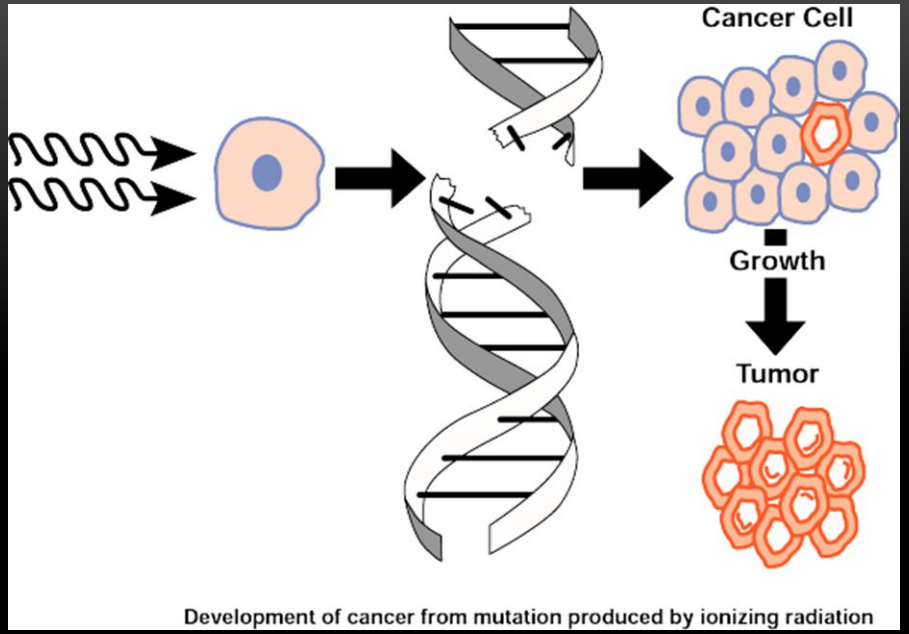
- Encourage radiation research and research funding

- Support the rising generation of radiation research scientists

Radiation Induced Chromosomal Aberrations, as seen with microscope



dical Impacts of Ionizing Radiation: ancer



Ionizing radiation harms our cells.

Radiation is more harmful to children

Children Between Birth and 5 Years

Lifetime Risk of Cancer Incidence (acute exposure between birth and age five)

2 Boys

4 Girls

Two problematic statements used by the Security Community:

1 A dose of radiation is similar to any other comparable radiation dose

2 Children are a sub-population

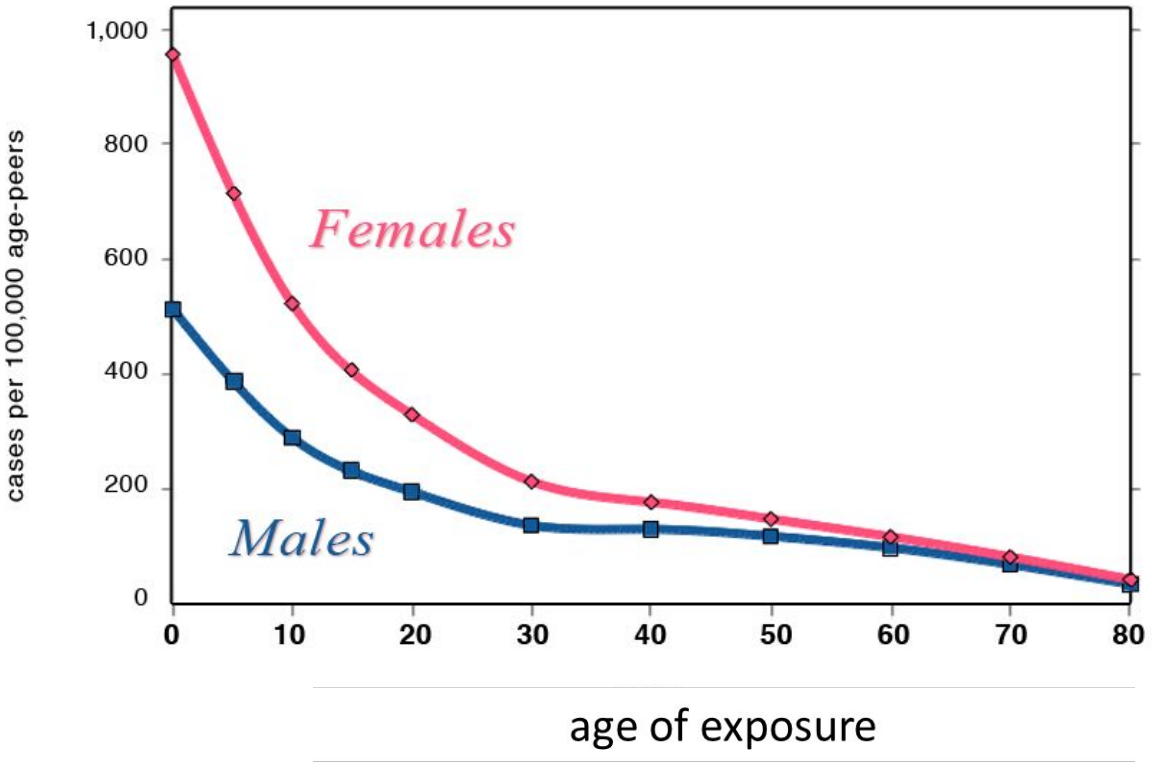
Humanitarian consequences of these old ideas are significant

Lifetime Cancer fatalities among those exposed to ionizing radiation as adults

2 Men

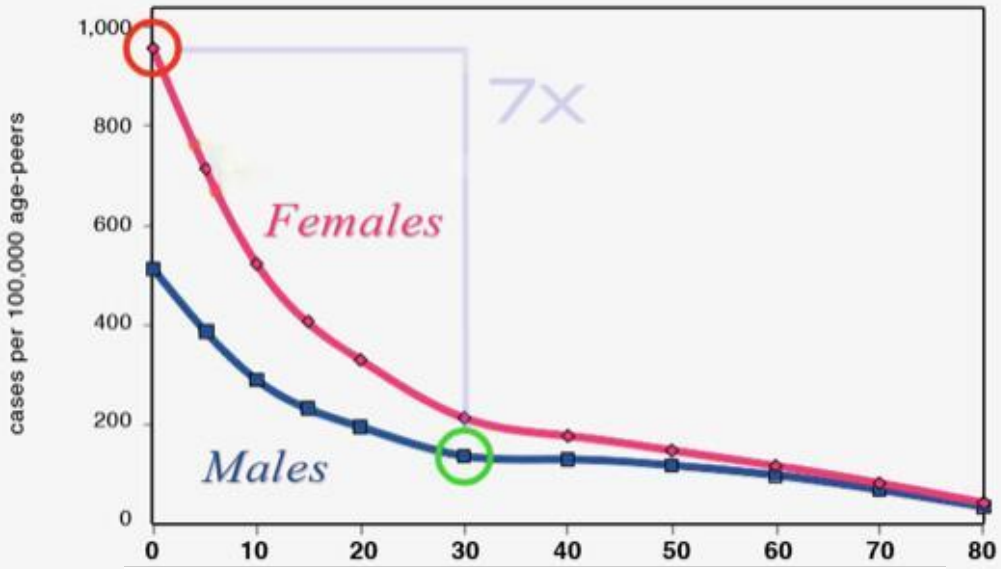
3 Women

Increased Cancer Risk by Age at Exposure to 20 mSv Radiation



Data Source: U.S. National Academy of Sciences BEIR VII Phase 2 Risk Model

Increased Cancer Risk by Age at Exposure to 20 mSv Radiation



Source of data: U.S. National Academy of Sciences BEIR VII Phase 2 Risk Model

Reference Man, a convention in radiation assessment, **assumes** that everyone is a 25—30 year old adult male.

However, biological sex is a factor in radiation harm.

Official Definition of "Reference Man"

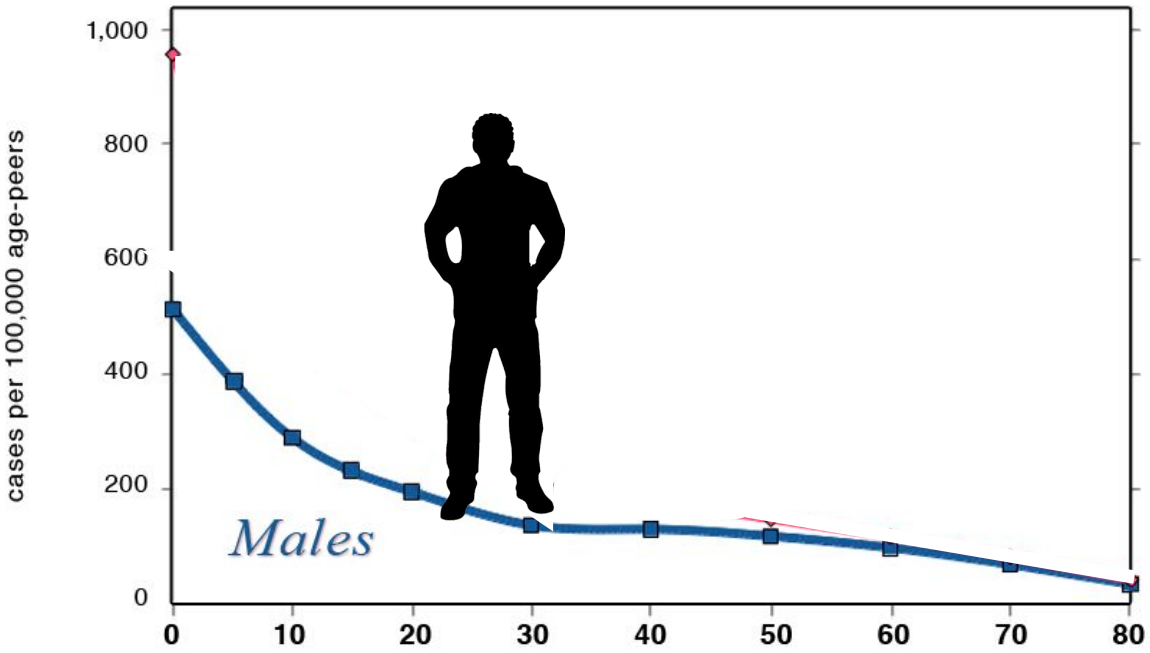
"Reference man is defined as being between 20-30 years of age, weighing 70 kg, is 170 cm in height, and lives in a climate with an average temperature of from 10° to 20°C. He is a Caucasian and is a Western European or North American in habitat and custom."

Source: International Commission on Radiological Protection. ***Report of the Task Group on Reference Man***. [ICRP Publication] No. 23. Oxford: Pergamon Press, 1975. Adopted October 1974. Page 4.

Note:
70 kilograms ≈ 154 pounds
170 centimeters ≈ 5 feet 7 inches

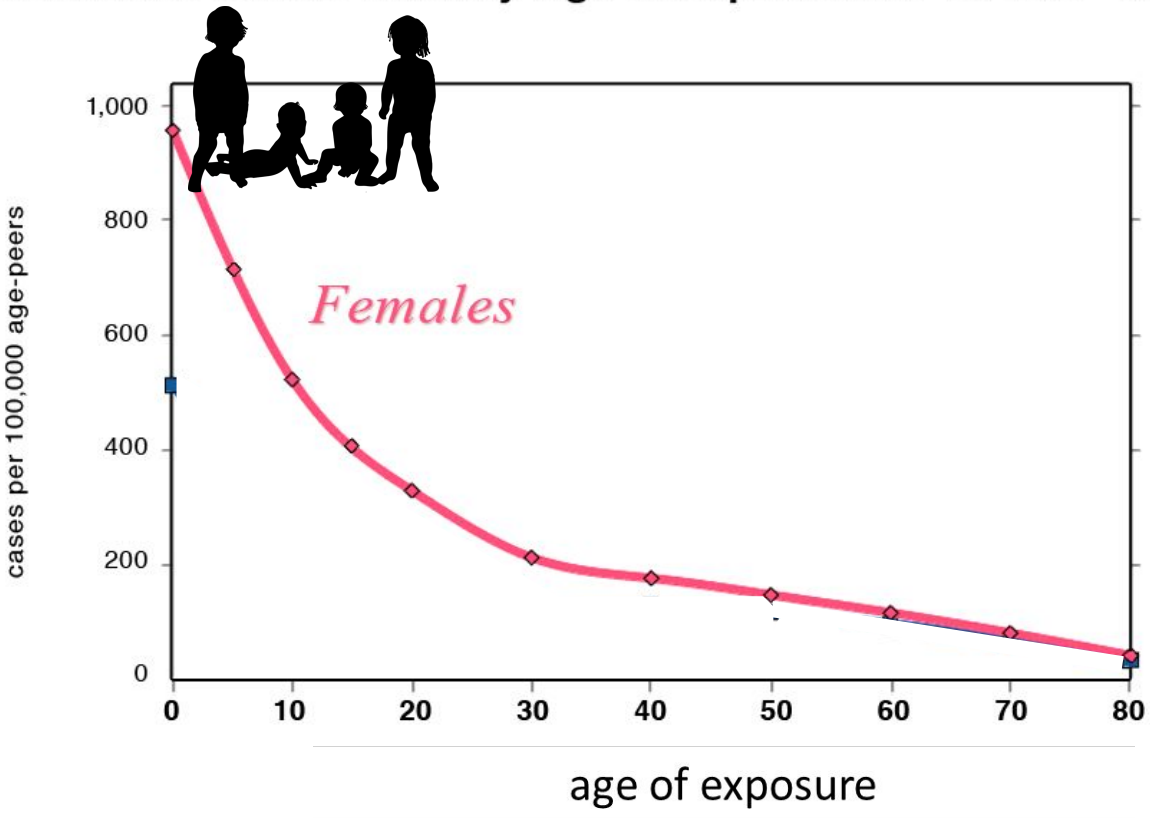
From www.ieer.org

Increased Cancer Risk by Age at Exposure to 20 mSv Radiation



Data Source: U.S. National Academy of Sciences BEIR VII Phase 2 Risk Model

Increased Cancer Risk by Age at Exposure to 20 mSv Radiation



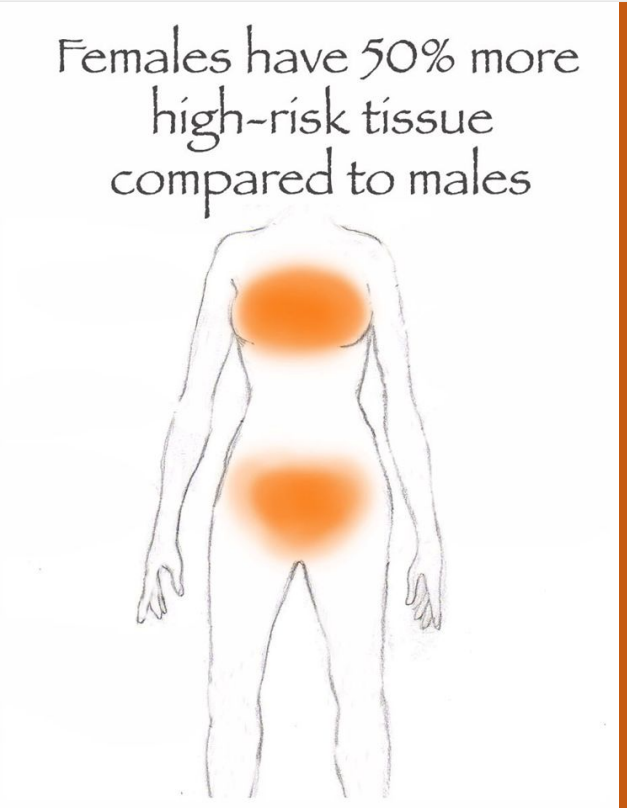
Data Source: U.S. National Academy of Sciences BEIR VII Phase 2 Risk Model

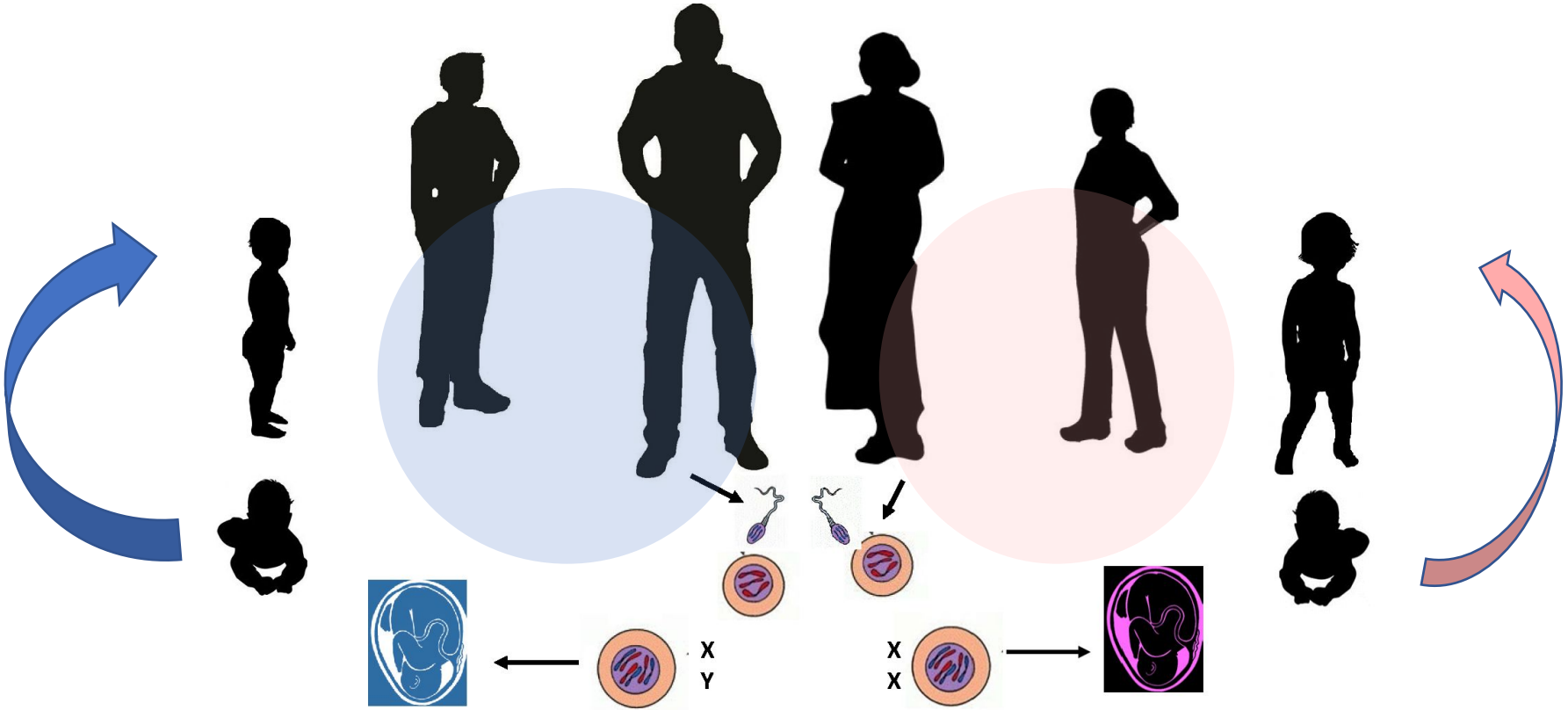
- Reference Girl—a new universal Reference Individual.
- Time to “thank Reference Man for his service” and retire him.
- Reference Girl is not only younger and female, she lives in a non-industrial “front-line” community subject to environmental injustice.
- She is a source of greater conservatism while keeping the same regulatory structure until we understand better what true radiation protection would look like.

Radiation regulation based on Reference Man results in systematic under-reporting of radiation harm for the global population.

Why is Gender a risk-factor for more cancer?

Dr. Rosalie Bertell

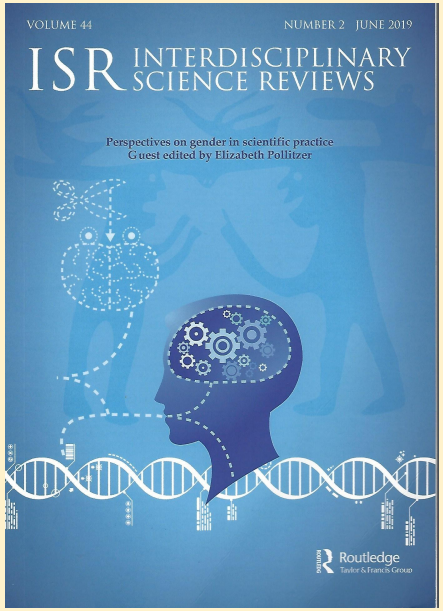




Full Human Lifecycle □

Radiation Exposure in Pregnancy: Three Generations

Research Questions

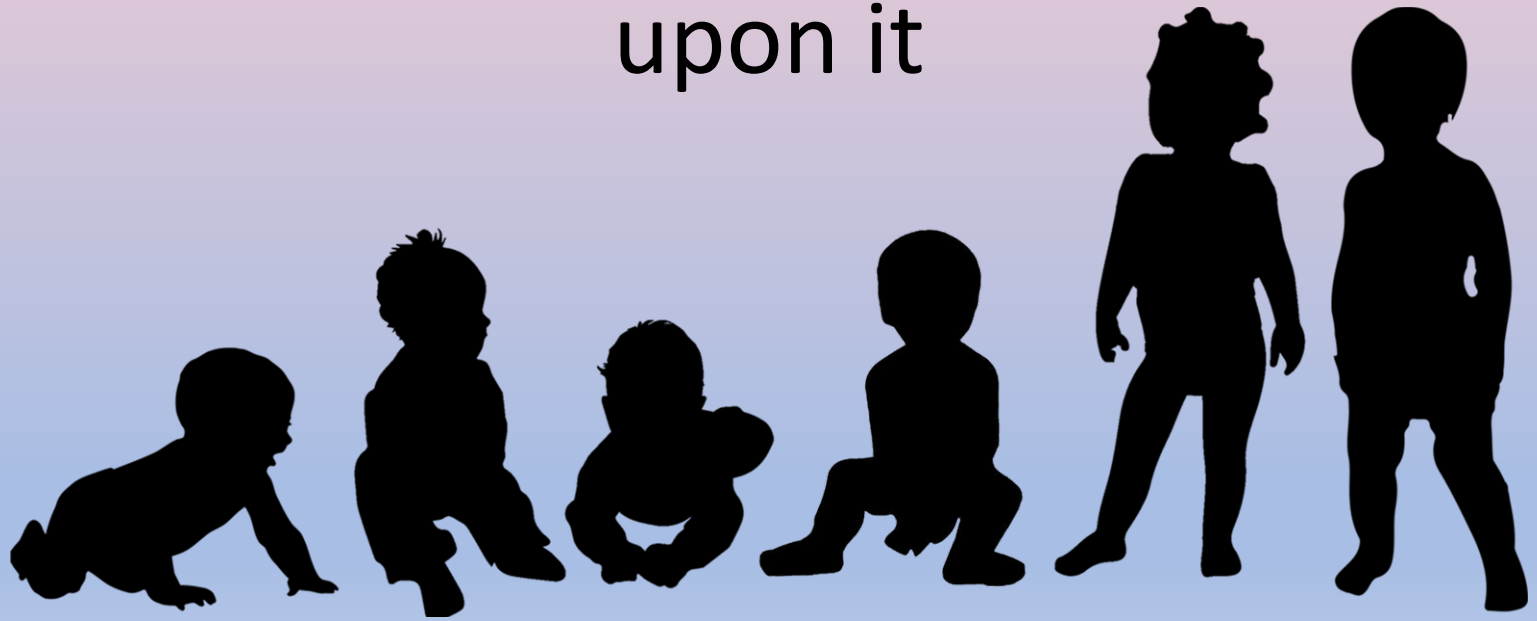


Disproportionate impact of radiation and radiation regulation

- Why is biological sex a factor in radiation harm?
- Why is sex difference in radiation harm greatest in young children?
- Does percentage of reproductive tissue, due to its reactivity to radiation, contribute?
- Is percentage of fat tissue a contributor?
- Is sex a factor in either rate of cell maturation, or cell repair mechanisms?
- …?

Prevention IS the cure…

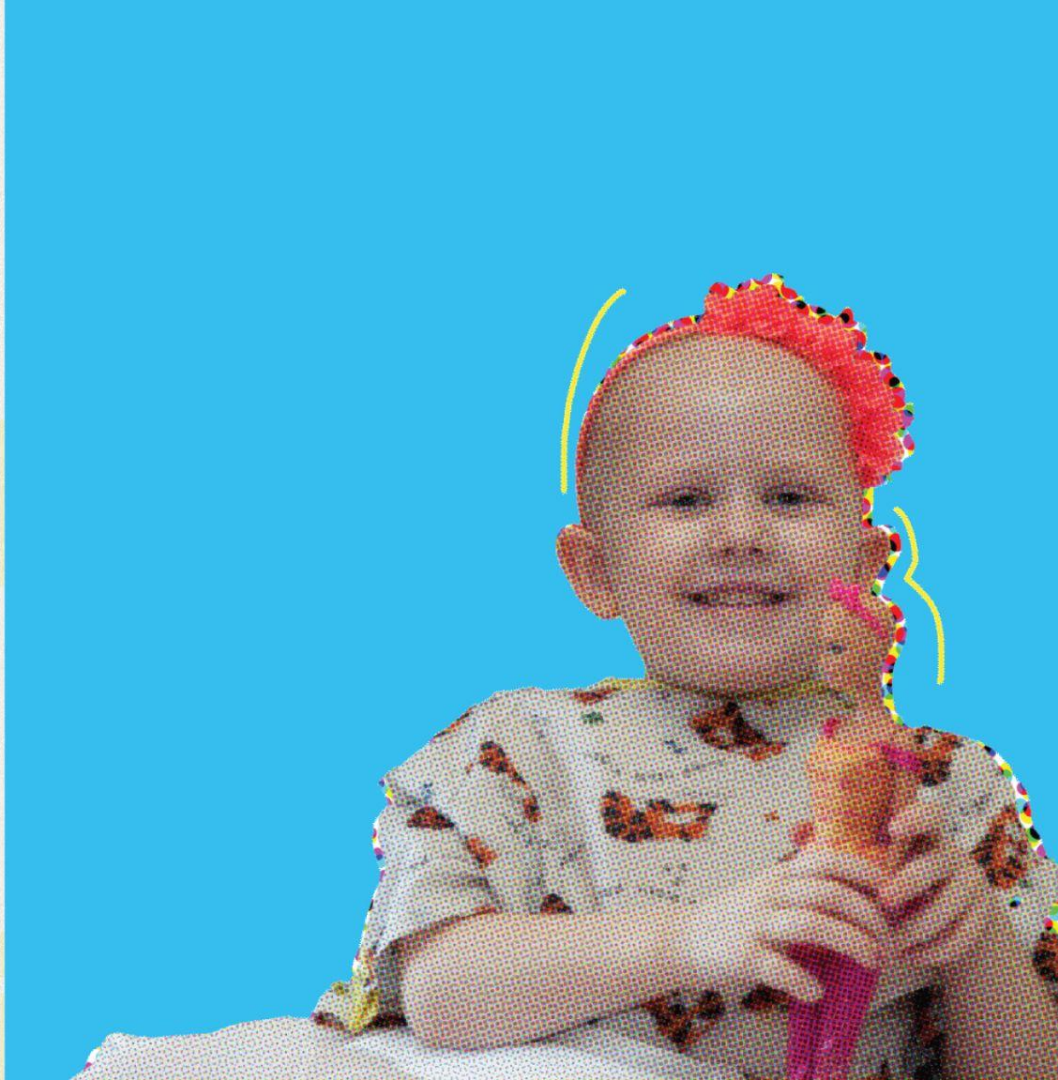
Future generations depend upon it



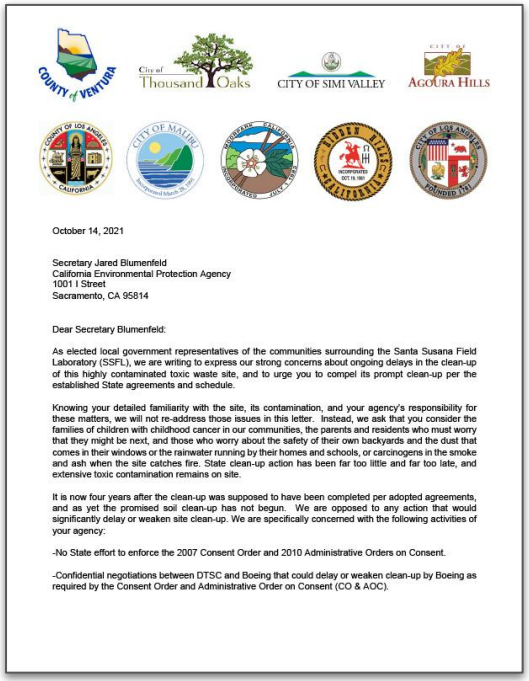
SSFL HEALTH IMPACTS

Where we are today

Melissa Bumstead
Parents Against Santa Susana Field Lab



Cleanup Agreements: 2007 Consent Order



October 14, 2021

Secretary Jared Blumenfeld
California Environmental Protection Agency
1001 I Street
Sacramento, CA 95814

Dear Secretary Blumenfeld:

As elected local government representatives of the communities surrounding the Santa Susana Field Laboratory (SSFL), we are writing to express our strong concerns about ongoing delays in the clean-up of this highly contaminated toxic waste site, and to urge you to compel its prompt clean-up per the established State agreements and schedule.

Knowing your detailed familiarity with the site, its contamination, and your agency's responsibility for these matters, we will not re-address those issues in this letter. Instead, we ask that you consider the families of children with childhood cancer in our communities, the parents and residents who must worry that they might be next, and those who worry about the safety of their own backyards and the dust that comes in their windows or the rainwater running by their homes and schools, or carcinogens in the smoke and ash when the site catches fire. State clean-up action has been far too little and far too late, and extensive toxic contamination remains on site.

It is now four years after the clean-up was supposed to have been completed per adopted agreements, and as yet the promised soil clean-up has not begun. We are opposed to any action that would significantly delay or weaken site clean-up. We are specifically concerned with the following activities of your agency:

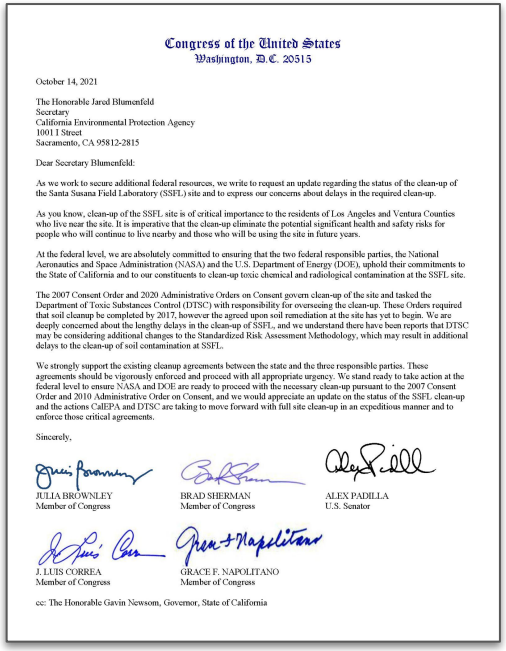
-No State effort to enforce the 2007 Consent Order and 2010 Administrative Orders on Consent.

-Confidential negotiations between DTSC and Boeing that could delay or weaken clean-up by Boeing as required by the Consent Order and Administrative Order on Consent (CO & AOC).

2007 & 2010 cleanup agreements supported by local, state and federal elected officials

- Signed between Boeing, NASA, Dept. of Energy and Dept. of Toxic Substances Control (DTSC).
- Didn't have a "cleanup standard" but complied with existing environmental laws and would remediate the site to match Ventura County's "open space" zoning, which includes agricultural and rural residential land uses.
- It stated the cleanup would be completed by 2017 and that a permanent groundwater remedy be in place at that time.

2010 Cleanup Agreements: NASA, DOE & DTSC



Congress of the United States
Washington, D.C. 20515

October 14, 2021

The Honorable Jared Blumenfeld
Secretary
California Environmental Protection Agency
1001 I Street
Sacramento, CA 95812-2815

Dear Secretary Blumenfeld:

As we work to secure additional federal resources, we write to request an update regarding the status of the clean-up of the Santa Susana Field Laboratory (SSFL) site and to express our concerns about delays in the required clean-up.

As you know, clean-up of the SSFL site is of critical importance to the residents of Los Angeles and Ventura Counties who live near the site. It is imperative that the clean-up eliminate the potential significant health and safety risks for people who will continue to live nearby and those who will be using the site in future years.

At the federal level, we are absolutely committed to ensuring that the two federal responsible parties, the National Aeronautics and Space Administration (NASA) and the U.S. Department of Energy (DOE), uphold their commitments to the State of California and to our constituents to clean-up toxic chemical and radiological contamination at the SSFL site.

The 2007 Consent Order and 2020 Administrative Orders on Consent govern clean-up of the site and tasked the Department of Toxic Substances Control (DTSC) with responsibility for overseeing the clean-up. These Orders required that soil cleanup be completed by 2017, however the agreed upon soil remediation at the site has yet to begin. We are deeply concerned about the lengthy delays in the clean-up of SSFL, and we understand there have been reports that DTSC may be considering additional changes to the Standardized Risk Assessment Methodology, which may result in additional delays to the clean-up of soil contamination at SSFL.

We strongly support the existing cleanup agreements between the state and the three responsible parties. These agreements should be vigorously enforced and proceed with all appropriate urgency. We stand ready to take action at the federal level to ensure NASA and DOE are ready to proceed with the necessary clean-up pursuant to the 2007 Consent Order and 2010 Administrative Order on Consent, and we would appreciate an update on the status of the SSFL clean-up and the actions CalEPA and DTSC are taking to move forward with full site clean-up in an expeditious manner and to enforce those critical agreements.

Sincerely,

JULIA BROWNLEY
Member of Congress

BRAD SHERMAN
Member of Congress

ALEX PADILLA
U.S. Senator

J. LUIS CORREA
Member of Congress

GRACE F. NAPOLITANO
Member of Congress

cc: The Honorable Gavin Newsom, Governor, State of California

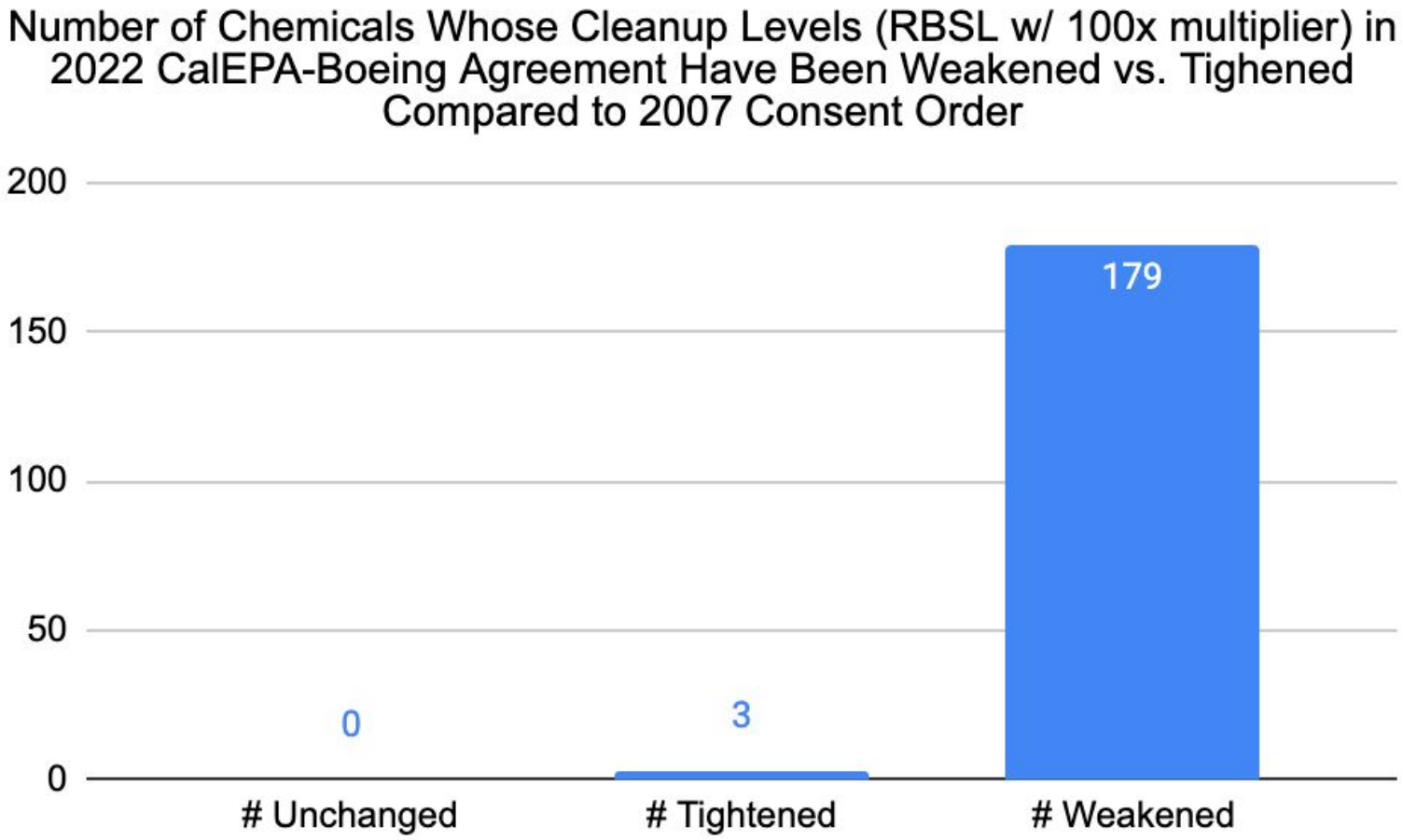
2007 & 2010 cleanup agreements supported by local, state and federal elected officials

2010 MAIN POINTS:

- Signed by NASA, Department of Energy, and Department of Toxic Substances Control (DTSC)
- Soil cleanup to be completed by Fall 2017 and a permanent groundwater remedy to be in place.
- Cleanup to **“background,”** that is, to remove all man-made contamination.
- All low-level radioactive debris and soil must be sent to low-radioactive licensed facilities and not local dumps.
- Exemptions to protect endangered wildlife and cultural artifacts

Learn more about the cleanup agreements: www.parentsagainstSSFL.com/cleanupagreements

2022 Settlement Agreement: Risk Based Screening Levels



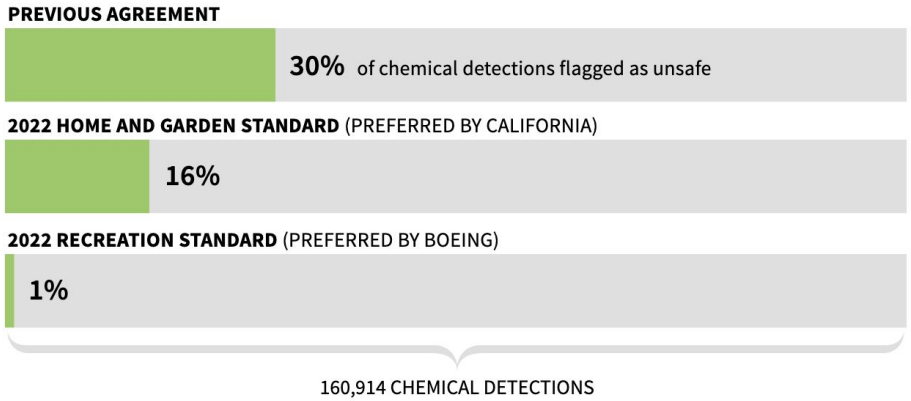
Cleanup Agreements: Summary

DTSC will posit that the Residential with Garden cleanup standard alternative is still on the table and that it may be the chosen alternative in the final clean up decision documents. What they will not tell you, is that they have redefined the Residential with Garden standard by incorrectly changing the numbers in the Standardized Risk Assessment Methodology (SRAM) documents as well as by improperly applying the aforementioned biological and cultural exemption multipliers. Combined, these tactics will result in over 90-95% of the soil contamination being left on site.

Reuters Investigative Report Confirms Settlement Agreement Analysis

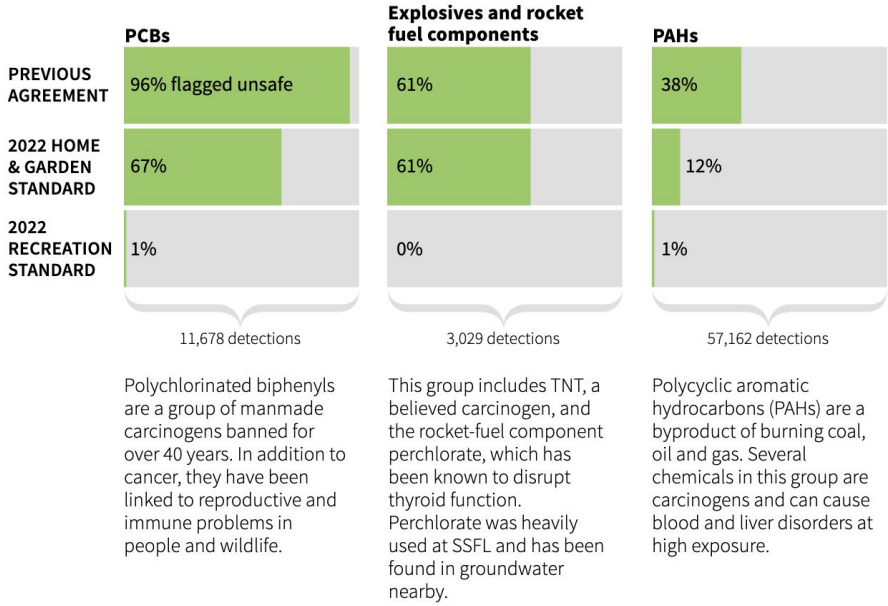
How the cleanup requirements could change

Boeing agreed in 2007 to clean up enough pollution to make it safe for people to live and garden on the former Santa Susana Field lab property. Following a settlement with Boeing in May, the state is now considering different cleanup levels, all of which would leave behind more contamination, according to a Reuters analysis. Boeing's preferred approach would make the land safe for recreation. State officials say they still favor a stricter cleanup that would make the land safe for homeowners and gardening; however they are calculating safety thresholds differently, so even that option would clean up less pollution overall than Boeing agreed to earlier.



The impact on three types of contaminants

Boeing detected 78 different contaminants on the site, including some that pose health risks and some that have migrated to the surrounding area.



Sources: Reuters analysis, California Department of Toxic Substances Control, Environmental Protection Agency, Centers for Disease Control

Read Full Article: [How Boeing created a nature preserve that may also preserve pollution]

Wildlife Impacts

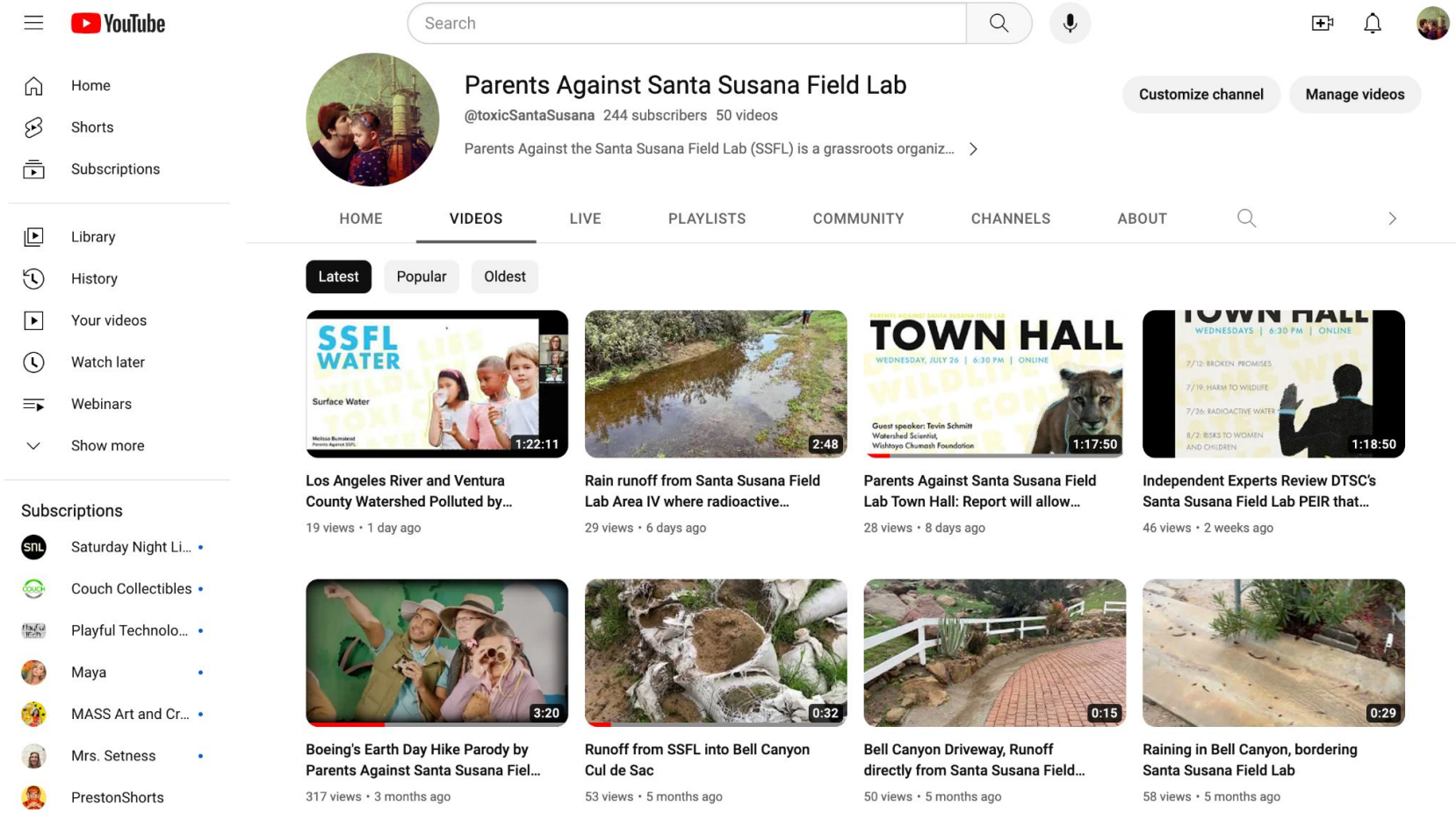
"SSFL has been and continues to pollute the surrounding watershed and groundwater basins for decades, causing irreparable harm to sensitive plants, wildlife and residents of the nearby areas."

Tevin Schmitt
Watershed Scientist,
Wishtoyo Chumash Foundation

Where we stand now

- 2023 Programmatic Environmental Impact Report (and 2022 Settlement Agreement) broke the health protective 2007 Consent Order and the 2010 Administrative Order on Consent (AOC)
- While Los Angeles and Ventura Counties and the and cities of Los Angeles and Simi Valley have all passed motions to sue if 2007 and 2010 agreements were broken, it appears that this plan is now threatened…
- DTSC may have successfully convinced our electeds and their legal counsel not to sue, but if they don’t take legal action now, not only would the cleanup be further delayed but the cities and counties would have to bring multiple suits over several years, as DTSC intends to release their final clean up agreements piecemeal.

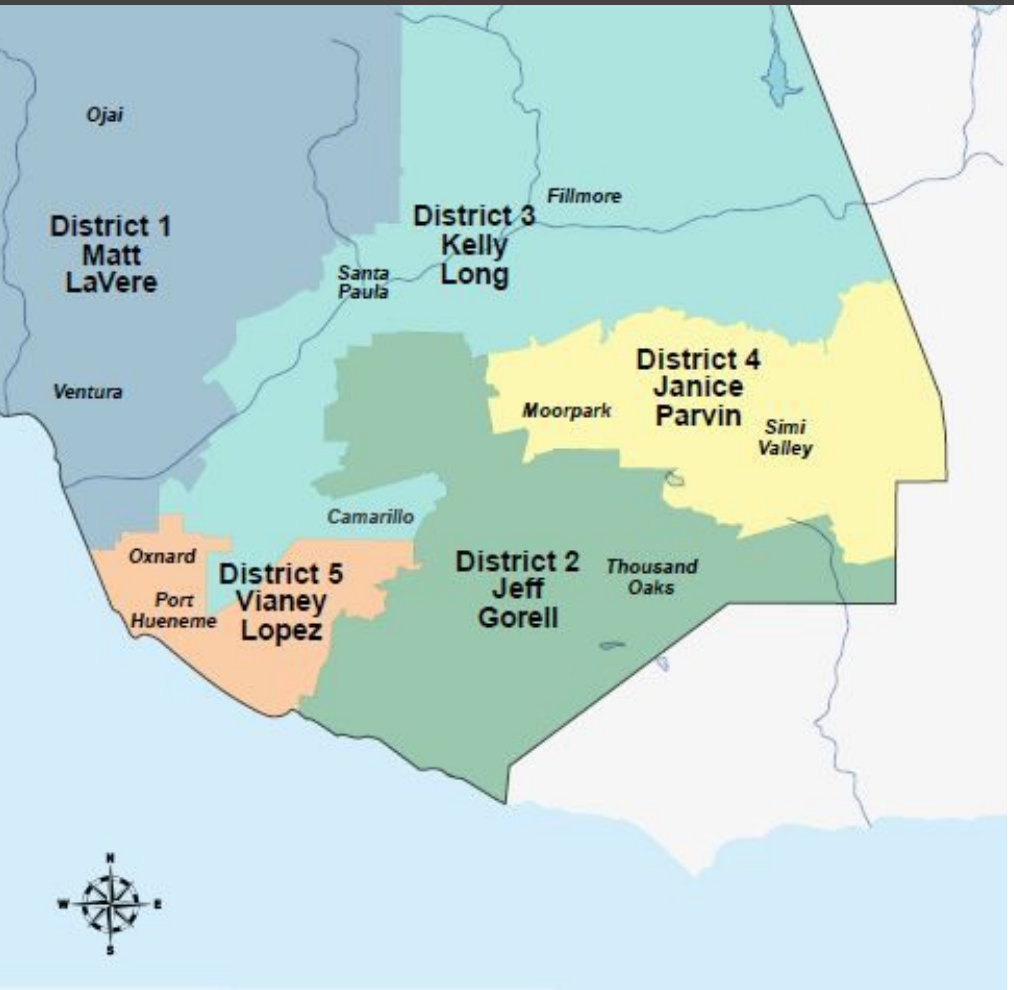
Learn More



https://www.youtube.com/@toxicSantaSusana/videos

Get Involved

Next Steps: Board of Supervisors



VENTURA COUNTY

Supervisor Matt Levere
Matt.LaVere@ventura.org

Supervisor Vianey Lopez
Vianey.Lopez@ventura.org

Supervisor Kelly Long
kelly.long@ventura.org

Supervisor Janice Parvin
Supervisor.Parvin@ventura.org

Supervisor Jeff Gorell
supervisorgorell@ventura.org

LOS ANGELES COUNTY

Supervisor Lindsey Horvath
thirddistrict@bos.lacounty.gov

Contact your Elected Officials

Potential Message for elected officials:

“I am concerned about the Department of Toxic Substances Control’s recent SSFL Environmental Impact Report and how it will result in the leaving of over 90% of the soil contamination on site. I support the full clean up of the Santa Susana Field Lab as outlined in the 2010 and 2007 cleanup agreements.”

Copies of motion available on www.parentsagainstssfl.com/cleanupagreements

Save the Date

Boeing's Proposed SSFL NPDES Permit

Date: September 28, 2023

Time: 9am

Where: Ventura County Government Hall of Justice
Board Of Supervisors Hearing Room
800 South Victoria Avenue, Ventura CA 93009

https://www.waterboards.ca.gov/losangeles/board_decisions/tentative_orders/individual/npdes/Boeing_Santa_Susana_Field_Lab/index.html

Next Steps: Stay in touch

Email us:

santasusanacampaign@gmail.com

Join our mailing list:

www.parentsagainstssfl.com/newsletter

Special thanks:

Physicians for Social Responsibility - Los Angeles

Gender and Radiation Impact Project

Now Streaming on Peacock TV