

FILED UNDER SEAL

Privileged and Confidential

7-18-05 ATTORNEY-CLIENT PRIVILEGE

Eco-monitoring

200-300 ppb (Indiana in May) (representing 4 days)

70% recovery

odd even for edge-of-field

↓
waiting for 12-hr. values
(total 8 over 4 days)

LA: 80-90 ppb

Freshwater aquatic values = 1500 ppb

CREM = modeling program based on phytoplankton recovery

detritation < 5% = no effect (reportable)

" > 15% = serious

Gene Burnett running study

combination of magnitude & duration

27 ppb for 30 days

38 " " 14 days

> parent only

Many factors can affect spikes:

Weather, timing of rainfall, quality of farming, state of tillage

4-5 instances of vandalism out of 40

state of water
(density of ag)

Recovery: duration of exp., concent. of exp., speed of stream,
sunny vs. cloudy

* SMZ RED OUT

FILED UNDER SEAL

Privileged and Confidential

3/13/06 w/ Estuary Newsletter

Main reaction to the mixtures work

A: EPA white paper

have to control confounding factors
explained our studies

Why is atrz still in what if studies not finished?

A: most studied

fish as substitute.

the work done GAP?

A: UCS & others

Mixtures

A: If understand what is happening w/ 1, may
enlighten us about how it interacts
w/ others.

syn on cutting edge of research.

science is new. Best way to test is
being developed.

syn jumping around, testing diff. things (like TH)
you distract scientific community.

Why frog tests not standardized?

A:

Are we only co. doing research?

A: syn only - valuable to farmer & workers

FILED UNDER SEAL

Privileged and Confidential

Vedlia 2/22/06

White River Env. Crimes TF

interviewed employees at home (FBI, IDEM, CO. police, EPA)

disposed of samples before analysis

thought problem w/ way taken

record-keeping

animosity generated when Vedlia took over

- cut costs, employees

- Hoosier Env. Council

TF took samples - found atrazine spikes (last July?)

IN statutes - issue not to provide safe water

(probably unconstitutional)

Have draft proposal for enhanced atrazine monitoring

one paragraph a problem

acute @ 3ppb; chronic @ well below 3ppb

Who can explain science to TF?

Lindsay testimony

Provided BAP info, link to Purdue website

Indy Star

prof at IUPUI - Winchester

birth defects + atrazine

FILED UNDER SEAL

Privileged and Confidential

4.3.06 ATZ CORE TEAM

Inside EPA outside response

Weed training

Fawcett papers: conservation / yield (cost of fuel)

Plant-Map Network, Weed Technology
(Cropland)

Right to have clean water

— carbon works on everything

— many other more serious problems

that don't have big co's attached to them

Mixtures — doesn't that multiple effect of chemicals
or possibly make non-toxic levels of one
chemical toxic?

NTP - atz maybe brought up as "great example"
but not focus of workshop (May 22-24)

FILED UNDER SEAL

Privileged and Confidential

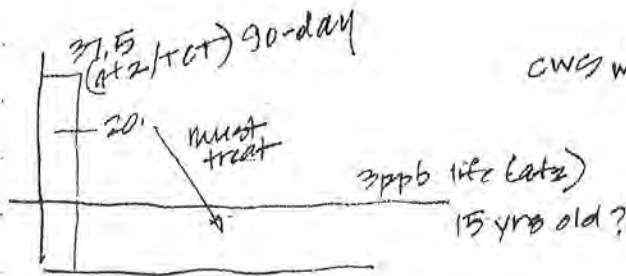
37.5 ppb - protective of most sensitive sub populations (humans, including children)
val
90 days not not connected to STWA
scientifically justifiable.

- none of raw water sources - even most exposed ones - exceed 37.5.
- those in mitigation have exceeded once historically

Why new standard?

- metabolites
- act for most sensitive effect seen in humans which was short-term study (not lifetime) (37.5 ppb x 300)
- small window of time during puberty to affect endocrine system

double standard



regulatory gap for CWS
CWS must regulate to lowest standard (3 ppb)

- cadmium
- arsenic
- lead
- E. coli

opportunity for call to action?

0.01 ppb reasonable detection limit
USGS can detect at 0.001 ppb

FILED UNDER SEAL

Privileged and Confidential

WOEH response 4.7.06

mischaracterization of IARC

not appropriate for scientific journal

• if published, want a rebuttal op in same issue

Latham/Wattins re-doing PACA rebuttal

* see P. Hest for names of CWS in AWWA study

Jim Brady - kits can be used well

can give false positives?

(Chlorinated disinfectants can interfere)

AWWA - no systems exceeded in MCL

check email from Beth re: Robeson / study

FILED UNDER SEAL

Privileged and Confidential

ATZ 5/8/06

careful publicly connecting activists to lawsuit
w/o proof.

Payon Sencil Samples

Mark Suprenant } present
Kevin Lemaire }

to St. Louis on B&B jet to see Tillery
personal injury claim possible (class action)
class action reform would keep case in fed. court

Jury focus groups May 24 & 25 - St. Louis
from IL outside Madison Co.

Living on Earth - Steve Curwood - April 21, 2006
breakthrough, EU
govt studies show no correlation

Prospect of supplying atz to Dow likely in future -
other generics not so likely
Arbitration w/ Sipcam - June/July

FILED UNDER SEAL

Privileged and Confidential

For JWC/TN EC:

- support EPA use of USA PBP data (residues)

PMP - w/mitigation & stewardship under FIFRA req's, no need for atr/snz to be added to this list

smz also "not likely"; harmonization used atr data & endpts

add 2004 UK & Australia safety reviews 2001 France?

Smz - very little dietary exposure
• consider raising MCL (Apple)
• good to remove older, higher non-crop rate uses

Info bullets:

how gethulcs for smz, including...
(pick up mitigation list)

→ atr & smz:

once monitoring data continues to show no exceedances that program funding can be used where need is greater; ongoing monitoring not needed.

atr & smz:

residual weed control good for env.
no-till

FILED UNDER SEAL

EU 2002 / frogs
CLA: thalidomide

HARPER'S ARTICLE

Privileged and Confidential

Jayne:

focused on frogs
farmers → runoff → water → humans
not explored as much as it could
have been

Jeff:

no new ground

since story completed, EPA took add'l action.
Tim is credible, but got short shrift
frogs not a burning issue for most
Tim's credentials missing.
Does not mention lawsuit

Sarah:

All research points to problem &
EPA is doing nothing.

Jose may need help re: 800 # language

Tom Bartlett

- Caution, reader wd see EPA as villain
- NYer probably going for nurse David / Isabella
- EPA should be concerned
- 60 minutes less likely to pursue since NYer passed
- endocrine disruption possible issue
- do nothing to attract unnecessary attention

FILED UNDER SEAL

ATZ

2-12-07

Privileged and Confidential

ECC

- no problems in IL
- 2 in Mo/1 in IN: continuing to monitor & address exceedances
- clay pan characteristics in Mo
- NRDC will sue to force monitoring in other places
- publicly available data (USGS) would help us, but larger streams
- our monitored watersheds not relevant to ES
- expect publicity from NRDC
 - more monitoring
 - ES effects

MN — Bruce Klaven (lobbyist)
 can't call w/HH → RF next wk

Cooper response:

1000s of x higher than env. concentrations

FILED UNDER SEAL

ATZ/ES

2/28/07

Privileged and Confidential

"likely to adversely affect"

① streams characteristics

② habitat

No direct effects	Only looked at
Indirect effects	ESs in lawsuit
riparian areas	
aquatic habitats	

Chesapeake Bay
shd do detailed, watershed specific analysis

Pink mucket → big river species
Rough pigtoe
Fine rayed pigtoe → outside ^{mapping} of 2 watersheds

EPA: 2 no streams could represent all 1172
EPA did not have specific locations
— only county level

species not restricted to algae diet
need fast-flowing water
one no stream actually dried down in Aug.
our streams represent lowest 5% in flow

* Oct. 8 — Frog GAP
Mar. 31 — deadline to submit info for eco GAP.

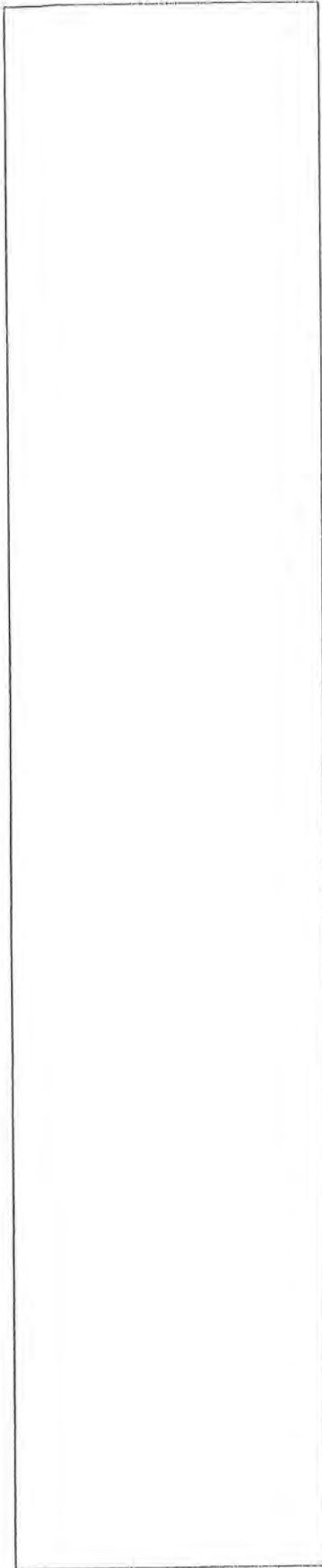
Buffer already required on atz label
Eco monitoring data not designed to be used
in this manner.

"EPA available data" as umbrella
NPDC could sue to require interim measures.

gap pos stmt for field / web site

- LW review
- Note from mktg
- Hill message
- Coordinate w/ CLA

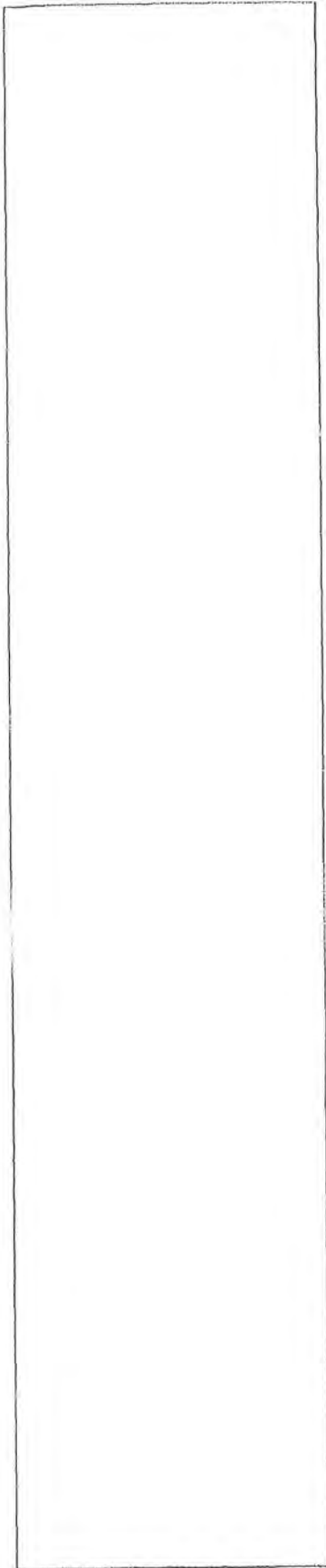
FILED UNDER SEAL



plan for judge ruling
luncheon in Chicago for those unable
to attend Springfield meeting?
update on possible publication in WT?
- celebration? to refresh story
other defendants, Crownmark,
to recognize importance
Hatch in Chicago in June

11/17/2004 2:00:44 PM

FILED UNDER SEAL



Highest levels of atrz in MO?

A series of horizontal lines for writing, typical of a notepad or lined paper.

LEVENGER 700-521-0840

FILED UNDER SEAL

Privileged and Confidential

Alex will follow up

Western Farm Press
Harry Cline - commentator

Sarah Muirhead
Seed stuffs

CBS NEWS

AUSTIN

1/11/08

Scott's plans for atz? did not agree to remove from wheat & feed.

Austin/Col State use atz in public areas?

- Atz levels well below established standards
- Trends flat or down
- protective of people/environment

Invinca - Rohm & Haas

drought tolerant

pre-emerge w/ Tilt

Corn / cotton / soy / wheat / rice

US then Latin

quote John Buckley (head R&H biz) & CEO

Jan. 17 target date.

FILED UNDER SEAL

Exempted and Confidential

Updated Courson reports —

unlikely to get VC to issue NR?

2nd option: ag group

Courson teaches M & W

Do private overview w/ Jumble
public presentation to exec

committee of farm groups?

Establish foundation.

LEVINER 800 344 0850

FILED UNDER SEAL

w/ Sara Shipley Hiles

2/1/08

DEFENDER Magazine

Privileged and Confidential

Immune system:

- Our study in large part answers that as well.
- Magnitude of study → would observe other effects on health.

Transparency:

- Diff. between journal & regulatory studies
- Science done in glass house

What's wrong w/ Hayes' studies?

- Unverifiable
- EPA could not

Our conclusions:

- Hayes is ignoring because it doesn't fit his story.

Send TP bio & atz pg. link (EPA)

FILED UNDER SEAL

Privileged and Confidential

Atrazine in Switzerland

Registration ended in '07

sell-out pd thru '08

In '05, review of atrazine registration announced

tbz used in Switzerland

Importance reduced over time.

carri not as important in Switz as US.

issues w/ta 3/26/08

TH putting together institute to study

environmental institute along Mississippi.

(Bob Brown; LSU, Miss State, Memphis?)

University centers of excellence funded by EPA

- one recently formed for nanotechnology

- is there a list of grants/topics?

w/Dave Bartlett 3/26/08

Don't F/U w/Ebrahim

let her continue research

not influential. media outlet

on finding neutral -> positive reporter

TH / atrazine not at high exposure level

Op to re-energize opposition

Atrazine as part of ethanol story

Pollution opposition argument secondary

Focus on audience list

Not for general public

Regulators / Legislators

No till / resistance manag. means

Long track record / safety

FILED UNDER SEAL

w/ BILL PRITCHARD (BNA)

5/15/08

Privileged and Confidential

UCSF STUDY / INGRAHAM

Further study suggested by author?
Atz cells in atz bath. — yes

~ 6000 studies / re-registered
+ think in ocean of data
conflicting w/ already published
how?
waited thru pos. stmt
explained aromatase

6/2/08

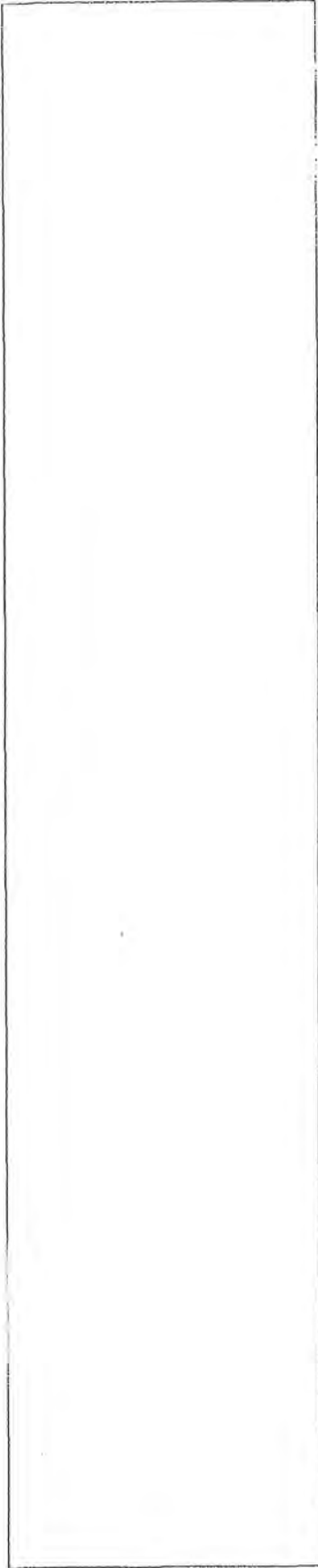
Ingraham call:
present protocol for re-doing study
if she doesn't do, we will

Hayes' work discrepancies:
contact EHP list (get Crispy to call?)
look at opportunity for publication
& content before deciding.

Ingraham:
atz doesn't mimic hormones
not an estrogen receptor

add + aspects to our statement?
provided 1st evidence that these cells
generate cyclic AMP.
no study exists that shows estrog. response
in whole animal.

FILED UNDER SEAL



registration

Privileged and Confidential

1979

EU

studies / history / benefits

what is responsible for discrepancies
between our / Hayes studies

P&TC News

Industry trends — reduced water products

FILED UNDER SEAL

Privileged & Confidential

STP:

- introduce role
- set up reason for mtg
- intro Tim
- how to use outline
- Q&A at end

- * bring salt & clear bowl / gallon jug / basket
- * create list of questions for critique
- * check on Tim's bio
- * make sure we have
- * find someone to take notes (Edon?)

principal scientist

Tim to provide general outline

questions:

How do we add pizzazz? (be interactive / Tim's presentation skills / credibility important)
 what do you hear from your neighbors / relatives?

\$30 million - est. expense?

total cost of bringing product to market
 salt / Tim atz / broch / MN ads
 TN booth copy / TN row

best estimates on "safe" amount,
 then safety factors added

eliminating at least one reason
 for frog population declines

premier study - frogs

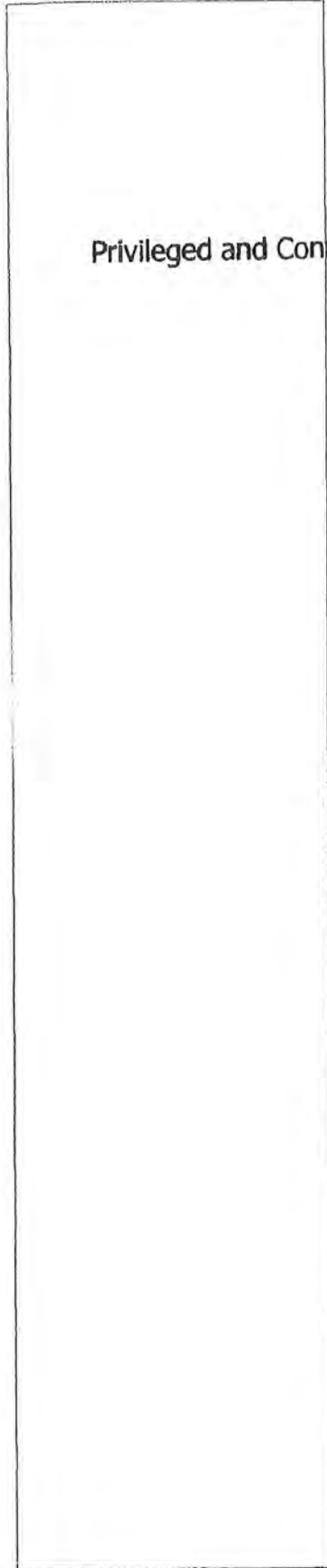
Seed Care - mark

collaboration w/ TNW

NR for AGA (Dec. 8)

timeliness decision by SEC approval

FILED UNDER SEAL



W/TIM 1/6/09

CALL PAT FAIRFIELD-ARTMAN
• FOCUS GROUP W/ STUDENTS ?

Privileged and Confidential

Litigation update
Counsel visit
Chicago visit
Prochure ?

Counsel -

docs discoverable.
take it from beginning
how involved
how paid
what to expect. from other side

Points Ackerman raised

nicotinic vs. atr

USDA study

double counting

Italy / Germany

Wants
email

Explain litigation process
& what effect will be if
these issues not addressed

Will counsel be surprised as prospective
witnesses ?

175 2451 R 4001542-0000

FILED UNDER SEAL

W/DON COURSEY & JAYNET.

1/9/2009

KURT
MARK
ALAN

Privileged - id Col

Don's paper:

- add 1-2 sentences to connect data between no detect conditions of lawsuit & actual effect on farmers

1st paper: Feb 27, 2007

Springfield debut / IL Farm Bureau
Working paper
How distributed?

double counting - done

USDA study (1994) - check w/Gene

EU - Wisconsin?

memo - problems w/ Va, IL, AR study

Updating reports:

MI: use latest data to update report for legislature w/ Abernethy rebuttal pts.

IL: 2007/2008 - go to New Orleans & educate attorneys on taking Abernethy report

Italy/Germany ^{corn} production does not even approach IL.

Address #/acre for each yr. Corn price & fuel cost (particularly if working paper)

Publication after '09 CA yrs of data?

FILED UNDER SEAL

Hydroxy atrazine → damages tadpoles?
Related to melamine?

Privileged and Confidential

no team lead

- clear msg. to DV: copy me on info
respect as comms lead
- re-establish process w/ subteams
 - issues handled by subteams
 - results reported to steering team
 - steering team not place to hash out issues
 - presence of non-steering team members
- agenda items generated by subteams

travel data comp case - Venice?

FILED UNDER SEAL

ATZ COMMS / RANDY KRITZ

3/6/09

Privileged and Confidential

protect equivalent of Hayes: Jeremy Smith

20K searches/mo. for atz

10 million for ag

< 1000 for Hayes

20 atz search terms used

99% information searches

< 5% are clearly negative

use 6 factors to measure visibility

Google page rank - (0-1 = no visibility)

1406 potentially visible pages on 713 unique domains

* Randy to look into funding for atzlovers.com

myths about atrazine - popular phrases

Possible Wikipedia editors:

Jane Whitacre
Ed Johnson

Jim Lamb

Werner Kloss

Keith Solomon

Jim Stephens

* Also Randy to be possible editors

1-2 hrs/wk. + 1/2 day to start

Google Scholar - optimize studies on search

Randy will optimize Chuck's blog

Use 360ms / Randy to encourage industry groups to link to atz.com

Chuck to blog re: atz.com

KNOX
Charlie
Brennan
St. Louis

Water quality
ag products?

Atrifacts.com - optimize site

Provide links on search path for water system officials, city council, carbon filtration

FILED UNDER SEAL

Privileged and Confidential

TH @ colleges:
ID EPA student to blog (V-F to ID)
Ad in school paper?

NIH: send white paper?

Block. Snt access to atzlovers.com?

Atz stories in headlines

ST-GABRIEL
(Ralph Caddell/
John Riley)

1. History / benefits to farmers (both)
(Frank Knight / Gene Hill)

2. Atrazine's role in sustainable farming
(Leonard Gianessi / Dick Fawcett)

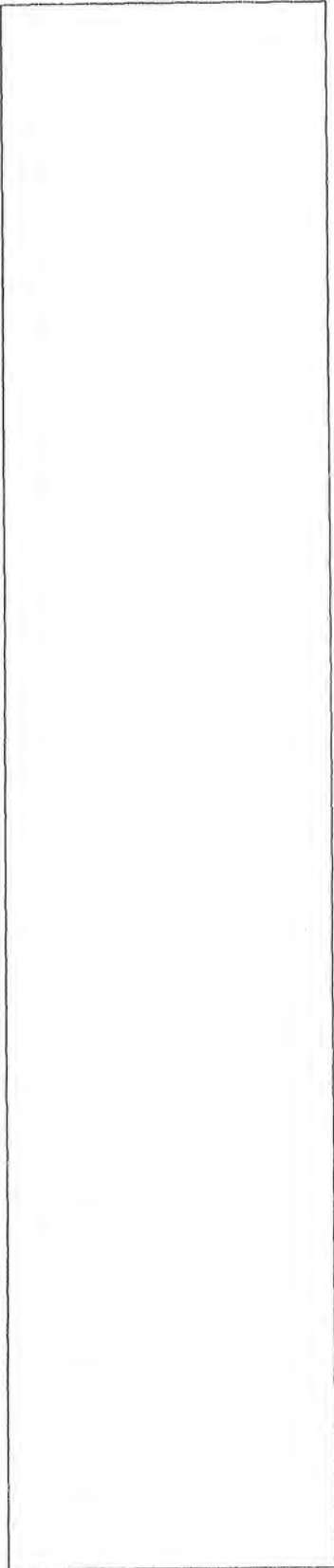
3. Stewarding atz through re-reg process (EPA)
- Water + Cumulative (Jeri White)
- Food (Janis McFarland)
- Residential

4. Atz's role in commercial success of
other snt products.
- Carrol Mosley

FILED UNDER SEAL

[Redacted Box] [Redacted Box]

Privileged and Confidential



Zebrafish study
decrease in body weight
2000 ppb / 200 ppb
no effect body length
sex ratio:
shift 25% to F in hormone control

no effect on mortality

FILED UNDER SEAL

6/15/09

AMP Data mtg / FOIA response to NRDC / NYT

meta files not included in EPA pkg to NRDC / NYT

Privileged and Confidential

- helps put non-detects, multiple sources into perspective

2003 - 2008 atz + smz ('05+)

to make it easier for public to ID source EPA assigned values by co. previously by individual monitoring site locations not revealed.

• further protecting integrity of monitoring sites & science conducted there

opportunity for tampering vandalism at other monitoring sites in past

NOT new information - already available on EPA web site. Doesn't change fact that none of CWS in 2008 exceed annual avg concentrations of 3 ppb - levels that are fully protective of all segments of population, even infants & children.

May 22 served w/ discovery

June 22 filed protective order w/ judge concerning it

- our objections to plaintiffs discovery requests
- a request for case mgmt conf
- our discovery requests of plaintiff

hearing set for end of August to address these issues

FORM NO. 700-504-000

FILED UNDER SEAL

Charles Dunigg dunigg@attorneys.com
310 916 6336 M
212 596 7477 W Privileged and Confidential

"significant story"
of questions

Atz & drinking water
ex. of contrav. & challenges of
~~sources~~ regulating water
data from last 8 yrs.
compared to data from distributors
own monitoring

monitoring science.
run-term delivery
Indiana > studies
IL

EPA
mammary gland develop.

with stud?

lead agency
state regulators
& cws
smaller
agencies

CWS (1Q or 2Q)
indiv. atz cws
+ CT
± 90-day rolling avg

trd not get last yr

gave data to EPA / who else gets data?
CWS miss a lot of spikes
CWS only monitoring

if Nov
from official
regulatory
agency

[under BWA, CWS req'd to send 1+
to residents if water spikes above 3?
(nat'l primary drinking)

<https://www.atrazine-watershed.info>

Want to same CWS & asked for data

Big series on water
published tightly together

Would probably
trigger more frequent
monitoring.

Under BWA, quarterly monitoring required.
Some exceptions.

Indiana may have had 1 exceedance from once/yr
monitoring.

FIVEX 400-44-000

FILED UNDER SEAL

w/ Charles Dubiag - NYT

8/20/09

Privileged and Confidential

water quality
 bulk of story focused on EPA; emerging screen
 run within next 4-5 days
 series will "drizzle out" over
 next 1 1/2 mos.

* Get AMP monitoring schedule.

health risks assoc'd w/ short durations
 of lower concentrations.

AHS: told him there was correlation
 between atz & birth defects.

AHS/Cancer: only at 90th percentile,
 not at 95th percentile confidence interval

Asked about law guide
 "late breaking facts"

Plaza & Versailles

Allows them to adjust their treatment
 methodologies.

Clean Water Act

non-point source contaminants
 possibly another compound

Focused on:

new science

how much CWS know about their data

failure to warn

how proactive we are in getting sample
 data to CWS

1) ecological studies - Winchester

2) AHS

3) Fenton (atz + metabolites)

FILED UNDER SEAL

w/ Charles ~~Frederick~~ ~~Conrad~~

8/10/09

Privileged and Confidential

* not relevant to human safety

published studies tend to look for effects
 studies done for regulation look for no effect
 then add safety buffer

12.5 ppb for TCT on 90-day rotating avg
 OW hasn't gotten around to adjusting MCL
 to this value

3ppb is parent atrz only

When taking drugs, margins of safety
 sometimes as low as 3, commonly 10.

MCL is approx. 100,000x lower than safe dose
 in most sensitive animal

In '08, WHO says 1.8/100 is adequate
 (as opposed to 1.8/1000)

low birth weight / brain deficits

1. not biologically plausible
2. no exposure
3. don't control for confounding factors
- 4.
5. fail to show dose response

sperm count

1. progressive decline in sperm count globally
2. subjects married to pregnant women

Mammary Gland

Enok, Raynor, Moon

Engaged in replicating Trenton work

Believe it's flawed

Confounding w/ effects on body wt w/ doses used
 publication submitted within 2-3 mos.

FILED UNDER SEAL

Privileged and Confidential



(Atrazine)
mixtures:
levels so common as to not have effect
low conc. do not affect human health

LEVINGER 800-544-0880

FILED UNDER SEAL

KARI LYBERSON, / Wash Post

8/24/09

Privileged and Confidential

* Eco monitoring sites to Post (states)

Explained eco/drinking water monitoring

14 GLP studies used to regulate atz
HALS

* ESA / activist lawsuit status

* send link to atz re-reg docs

benefits

* 91 CWS states / major cities

the risk

When assessment is refined, it will confirm that
Atz has no effects on the Delta smelt

FILED UNDER SEAL

w/ Farm Journal

12/20/09

Private and Confidential

Atz:
on corn & all crops - Greg Vincent

media Summit

Smith - cotton

Applied Resistance

more privacy from other media

Swanton in person

cheat sheet of products / ais / for person

travel expense concern

Dec. 14

Monday, Nov 30

file motion to designate suit as lead case

Representation to court:

will produce ~ 300k pages / mo for discovery

Governance for coalition

→ examine options w/ Jeff Morris

WFWG look at web site starting as told.

FILED UNDER SEAL

12/16/09 WTTWG

Privileged and Confidential

Eileen - main contact
shared responsibilities
Adam - social media
Clark - legal issues

cc: Eileen, Josh, Adam on everything

Resources: re-assess?

After 1st yr:

meet in GGG to discuss how to move forward on law suit

Thur. mtg: use Google doc status report

Web site: schedule discussion w/ Jeff Harris re: reaching out beyond farming groups

WSJ: Kim Strassel precautionary principle theme

12/17/09 COMMS MTG

FR w/ ILFB

Dana Smith - Farm Journal

Adam's met w/ Jay Byrne will unfold social media strategy

BCAN approached ACTS re: WTTW editors

LEVEN GLE 300-116-0889

FILED UNDER SEAL

Privileged and Confidential

w/ Lori Laughlin, ILFB

Ryan Henke
Young leader
talked to county president
who went thru media skills training
Also seed, fertilizer salesman

Needs talking points

Atz update 1/27/10

Raw/finished drinking water
monitoring data submitted Friday
Guz 3.26 (1 of 6 sites)

Epi (Harvard) panel

Feb 2 - deadline for submitting comments on
DC ban bill

Will Lab breast bud report
- discounts Eric Fenton's work
1-2 mill breast bud cells counted
multiple generations not affected

Aromatase review
Metabolism review - Jim Stevens

Who should submit MN report?
CLA: AAs / incident reports
AFFF / NCGA both commenting
Jere submitting LSP / PAN / tr

Must
submit
by Jan 30
for
April
EAP

11-01-08-08 2004-514-0088