

# 01\_MASTER\_DOSSIER

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## MASTER DOSSIER — John P. Frawley, toxicologist (Hercules Inc.)

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*Documentary reconstruction of his career, his "de minimis" / toxicological-  
insignificance proposal and the FDA's reaction, and his role in the Agent Orange /  
dioxin litigation.*

**Evidence grading on every claim: [CONFIRMED-primary]** (a primary source was read) · **[secondary]** (a secondary source asserts it) · **[absence-of-evidence]** (searched, not found). Companion files:

02\_Frawley\_bibliography.md · 03\_DOCUMENT\_REGISTER.md · 04\_TIMELINE.md · 05\_OPEN\_QUESTIONS.md · 06\_ANALYTIC\_MEMO.md . Verbatim quotes are kept under 25 words.

**Production note.** Built from two local primary PDFs (Frawley 1965, 1967) plus a 19-agent research workflow (8 reconnaissance + 4 document-acquisition + adversarial verification). The Justia full-text 403s the automated fetcher throughout; the opinion text was recovered via the `cetient.com` and `r.jina.ai` reader-proxy mirrors and cross-checked across three independent agents.

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## 0. Headline findings

- 1. The de minimis proposal is fully reconstructed**, including the part the brief most wanted — *what the FDA actually did with it*: "serious consideration" → referral to an **NAS/NRC Food Protection Committee** (the 1969 monograph *Guidelines for Estimating Toxicologically Insignificant Levels of Chemicals in Food*) → the FDA **National Conference on Indirect Additives** (Feb 1968) → the **Ramsey Proposal** (50 ppb), **abandoned 3 June 1971** as legally unworkable. The idea was resurrected by **Rulis (FDA, 1987)**, who **explicitly credits Frawley**, and codified in the **1995 Threshold of Regulation rule** (21 CFR 170.39) — which cites Rulis, *not* Frawley.
- 2. The congressional question is resolved: there is no evidence Frawley ever testified before Congress.** The Aug 1967 Dingell hearing witness was FDA Commissioner **Goddard**, not Frawley; Frawley is **absent from the (directly read) witness index of the 1970 Senate 2,4,5-T hearings.**
- 3. Frawley is at the evidentiary center of the Agent Orange MDL.** His deposition + affidavit are the sole basis on which **Hercules won summary**

**judgment** on the government-contractor defense (565 F. Supp. 1263) — a *victory later **withdrawn** by Chief Judge Weinstein before the 1984 settlement.*

4. **A crown-jewel primary document ties Frawley directly to the inter-company dioxin discussions: the 19 March 1965 V.K. Rowe (Dow) → "Dr. John P. Frawley, Hercules Powder Company" letter** (Poison Papers Bates **B 1575**; DocumentCloud **3253794**), read in full.
5. **Document A and Document B — BOTH now have concrete primary handles (upgraded 2026-06-09). Doc A** (3 Jul 1963 Frawley → Rowe letter) is indexed as exhibit **H281 14-1 5** in a local MDL-381 deposition/exhibit packet (ToxicDocs RBqNnvVr...) — the first production locator ever found (scan still to pull). **Doc B** is now confirmed as a **12 Jul 1965 confidential Frawley/Hercules memo recording a 9 Jul 1965 phone call with Earl Farnham of Dow** — its verbatim wording ("Dow was extremely frightened that this situation might explode"... "the whole industry will suffer"... "fearful of a congressional investigation") recovered from a **litigation brief** (ToxicDocs jyBDvYGz...) and indexed in Poison Papers DowDATA as Bates **A303**, NOT just the old secondary paraphrase. The old "rabbit-liver study" detail is **absent** → it was a conflation. **The consistency analysis is in 06\_ANALYTIC\_MEMO.md ; full acquisition sweep in \_workflow\_results/ACQUISITION\_TARGETS\_2026-06-09.md .**
6. **ToxicDocs — corrected, downloaded, and MINED (see 07\_TOXICDOCS\_FINDINGS )**. An earlier conclusion that ToxicDocs held nothing was **wrong** (it relied on Google's incomplete index). The native search has **251 "Frawley" documents**; all 251 are now **downloaded locally** ( ./toxicdocs/ ) with text and triaged (**59 confirmed / 88 likely**). Identity is **confirmed** (e.g. "*Jack Frawley, Chief Toxicologist, Hercules Inc*"). The payoff is large: the **Allied Signal/SPI vinyl-chloride cluster (1966–72) is the chemical-industry coalition's internal correspondence promoting and negotiating Frawley's de minimis proposal with the FDA** — upgrading Strand I from "a published proposal FDA mulled" to "**the banner of an organized multi-association industry campaign.**" Frawley also recurs across the PCB/lead/asbestos/dioxin product-defense collections. (Full-text mining also caught a real **namesake** — a 1949 beryllium/occupational-lung "John P. Frawley, Ph.D." — and corrected a false PCB-paper attribution.)

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## 1. Subject identity & disambiguation

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**Verified identity: John P. Frawley, PhD** — U.S. FDA Division of Pharmacology toxicologist (publishing 1950–59 with O. Garth Fitzhugh and Arthur A. Nelson); chief toxicologist / General Manager of Health, Environment and Safety at **Hercules Inc.**, Wilmington DE; **SOT charter member (1961)** and founding Councilor (1961–62); later **IS RTP president (1989–90)**; principal of the consultancy **Health & Environment International Ltd.** Same-name non-targets (priest d.2013; Patrick J. Frawley Jr. d.1998; linguist William Frawley) were excluded throughout.

Item	Finding	Grade
PhD; SOT charter member 1961	"John P. Frawley, PhD" on the official SOT charter-members list; founding Councilor (1-yr term) with Lehman & Oser	<b>[CONFIRMED-primary]</b> (toxicology.org)
FDA Division of Pharmacology start	Co-authored Fitzhugh–Nelson–Frawley from 1950; wrote the 1968 tribute to mentor O. Garth Fitzhugh	<b>[CONFIRMED-primary]</b> (PMID 14774791; 4876430)
"with Hercules since 1956"	Recited in the Agent Orange opinion from his own deposition	<b>[CONFIRMED-primary]</b> (565 F. Supp. at 1273)
<b>1987 award = Arnold J. Lehman Award</b> (NOT the "Merit Award")	SOT History: the Lehman Award went to Frawley; the 1987 <b>Merit Award</b> went to <b>Bo Holmstedt</b> . <i>Corrects the brief.</i>	<b>[CONFIRMED-primary]</b> (SOT History; Awards booklets)
Inaugural RTP article identified	<b>"The 1980s — A decade of change," RTP 1(1):3–7 (June 1981)</b>	<b>[CONFIRMED-primary]</b> (PMID 7186152)
ISRTP president 1989–90; W. Gary Flamm VP; Health & Environment Int'l Ltd.	Per SourceWatch (ISRTP records); primary roster not directly viewed	<b>[secondary]</b>
<b>Death ≈ 2003–2004</b>	No deceased asterisk in SOT 2002-03 booklet; asterisked in 2004-05 & 2013-14; absent from 2003-04 In Memoriam. Exact date / obituary <b>not found</b> .	<b>[CONFIRMED-primary]</b> for the bracket; <b>[absence-of-evidence]</b> for exact date
<b>PhD field = "Biological Chemistry"</b> (NEW, 2026-06-09)	Stated in the <b>Kemner v. Monsanto</b> witness list: "John P. Frawley... Ph.D. Biological Chemistry" (ToxicDocs XRqYoX0mvYxZNM88K8VJ8qr3w). <i>Institution &amp; year still unknown.</i>	<b>[CONFIRMED-primary]</b> (field); <b>[absence-of-evidence]</b> (institution/year)
Birth date/place; PhD institution & year; exact Hercules title progression	Not located online (military-officer status in 1953 implies birth ~mid/late 1920s — inference only)	<b>[absence-of-evidence]</b>
<b>Second, likely-UNSEALED sworn testimony: Kemner v. Monsanto</b> (St. Clair Co., IL) — <b>deposed 8 Mar 1983 &amp; 7–8 Feb 1984; testified at the Vertac trial</b>	Per the Kemner witness list (ToxicDocs XRqYoX0... ). A route around the PTO-43 seal on the MDL 381 deposition.	<b>[P-cite]</b> (transcript not yet pulled)

### ⚠ Open disambiguation: the 1953 Korean War / 46th MASH "1st Lt. J. P. Frawley"

Two workflow agents **disagreed**, and the question is genuinely unresolved:

- The **biography agent** identified the toxicologist with the "**John P. Frawley, 1st Lt., Medical Service Corps**" listed on the **46th MASH** Surgical Research Team (Korea, July 1953, with Curtis Artz and John Howard) — and with the eight **1955 combat-casualty papers**.
- The **bibliography agent** treated that MASH officer and the 1955 surgical papers as a **different** John P. Frawley and **excluded** them.

- **Neither proved its case.** The strongest *circumstantial* point for "same man": the toxicologist's publication record has a **gap from 1953 to 1955** that coincides exactly with the MASH service window, and a Medical Service Corps commission is the route by which an FDA pharmacologist would do shock/resuscitation physiology at a surgical-research team. **Treated as OPEN** — see 05\_OPEN\_QUESTIONS (NARA military service record / Who's Who is the way to close it). *Do not assert either way.*
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## 2. STRAND I — The de minimis / "toxicological insignificance" proposal and the FDA's reaction

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### 2.1 Chronology and text history of the proposal

- **The commercial root (1964–65).** After the 1958 Food Additives Amendment, FDA refused to treat Hercules's food-grade rosins as safe without 2-year studies. Frawley's 1965 rosin paper states the problem plainly — >70 rosin products, **34** needing study at **~\$50,000 each** — and that the studies were "**conducted under contract by the Industrial Bio-Test Laboratories, of Northbrook, Ill.**" [**CONFIRMED-primary**] (Frawley 1965, pp. 65–68, local PDF). *This is the direct financial driver of the deregulatory proposal.*
- **First public airing — 14 Sept 1966.** At the **152nd ACS National Meeting, New York**, Frawley advanced the rule that any indirect additive used at **≤0.2% in the container** (contributing **<0.1 ppm to the diet**) is "toxicologically insignificant," *unless* it is a carcinogen, a pesticide/heavy metal, or toxic at **≤40 ppm**. A companion FDA-critical paper was given by packaging attorney **Jerome H. Heckman**. Data base then = 143 chronic studies. [**secondary**] (Keller & Heckman / PackagingLaw.com), corroborated by Frawley's own "last September... 143 studies" line [**CONFIRMED-primary**].
- **Mature version — 25 Jan 1967, BIBRA London.** Published as *Food Cosmet. Toxicol.* 5(3):293–308 (220 chronic studies). The diet threshold (0.1 ppm) and container threshold (0.2%) are stated on p. 296; the framing of the U.S. submission as **GRAS at 0.2%** "last September" and FDA's posture ("authorized me to tell you that they are giving it serious consideration") on p. 301. [**CONFIRMED-primary**] (local PDF).
- **Third public airing — 13 Feb 1968, the FDA National Conference itself (the de minimis address to FDA).** Frawley's conference paper "**A Reasoned Approach to Regulation Based on Toxicologic Considerations**" was printed in *Food Drug Cosm. Law J.* **23(5):260–270 (May 1968)** — **now read in full, local PDF**. The data base has grown to **245 chronic studies** ("\$15–20M... over 90% of all such studies"); the rule is pinned to **Regulation 121.2500(d)** ("≤0.2% by weight of the container... not heavy metals... or pesticides"); and he claims "**twenty-four other toxicologists... supported this proposal in writing to the FDA.**" He also states the **financial driver in the first person**: "I personally had spent over a million dollars of my Corporation's money investigating the safety of food packaging materials... it was all wasted." *This is the Frawley side of the Summerson "sheer nonsense" showdown — both sides now in primary text* (08\_VINYL\_CHLORIDE\_CAMPAIGN.md §4; excerpt in sources/). [**CONFIRMED-**

**primary]** (local PDF). Data-base progression across the three airings: **143** (ACS 1966) → **220** (BIBRA 1967) → **245** (FDA 1968).

## 2.2 What the FDA actually did — the answer to the central Strand I question

- **"Serious consideration" was real but produced no rule. [CONFIRMED-primary]** (Frawley 1967, p. 301).
- **Referral to the National Academy of Sciences.** The NAS/NRC **Food Protection Committee (Food and Nutrition Board)** reviewed the ACS paper and issued **"Guidelines for Estimating Toxicologically Insignificant Levels of Chemicals in Food"** (1969, 11 pp.; **authoring committee CONFIRMED-primary** via NAP record 20376), reprinted as the Appendix to *Evaluating the Safety of Food Chemicals* (NAS-NRC **1970**, 62 pp.; NAP record 20498). **Correction to the prior characterization:** the committee's operative presumption was **1.0 ppm** in the diet (ten-fold *above* Frawley's 0.1 ppm) for substances meeting four structural criteria — verbatim per the FEMA/Oser–Hall (1972) reprint — with carcinogen/ pesticide/heavy-metal exclusions. **[secondary]** for the 1.0-ppm figure (FEMA quotation; the NAP originals are image-only/un-OCR'd); **[CONFIRMED-primary]** that the reports exist. **Frawley sat on its "Ad Hoc Committee on Insignificant Levels" but declined to help draft the report** — his **12 July 1968** letter to that effect survives (UCSF Darby Papers **yhgd0228**). **[CONFIRMED-primary, locator]**.
- **FDA National Conference on Indirect Food Additives, 13 Feb 1968**, opened by Commissioner Goddard — convened partly to answer Rep. Dingell's unanswered August-1967 questions. **Now [CONFIRMED-primary]:** Frawley's own conference address survives as *Food Drug Cosm. Law J.* 23(5):260–270 (local PDF), which dates and locates the conference and restates his proposal *to FDA*; FDA Bureau of Science chief **W. H. Summerson's** rebuttal at the same session is independently in primary text (`08_VINYL_CHLORIDE §4`). (*Frawley's paper was listed on the SPI agenda as "Toxicology of Indirect Food Additives."*)
- **The Ramsey Proposal (1969–71).** FDA's Dr. Lessel L. Ramsey drafted an exemption for substances migrating **≤50 ppb**; at a **3 June 1971** meeting FDA concluded it could not proceed, deeming it "scientifically sound" but legally unworkable. *This is the concrete fate of Frawley's idea inside FDA.* **[secondary]** (Heckman). → **Now documented from primary industry files** in `08_VINYL_CHLORIDE_CAMPAIGN.md`: the FDA 0.05-ppm "Ramsey" counter-proposal, the named FDA actors, and the Feb 1968 National Conference where FDA's Bureau of Science chief **W. H. Summerson** publicly called the proposal's core device **"sheer nonsense"** while conceding its "soundness."

## 2.3 Propagation into modern regulation (the citation lineage)

- **Rulis (FDA, 1987)** "De Minimis and the Threshold of Regulation" **explicitly credits Frawley:** the toxicity pattern was "duly noted by Frawley in 1967, using a different data base" (ref. 2 = Frawley 1967). **[CONFIRMED-primary]** (full text downloaded; regulations.gov mirror).

- Lineage **Frawley (1967)** → **Flamm & Rulis (1987–92)** → **Munro (1990, 1996)** → **Kroes/EFSA (2000–04)** → **TTC** is confirmed with exact citations. **[secondary]** (FPF TTC dossier 2024).
- The **1995 FDA Threshold of Regulation final rule** (21 CFR 170.39; **60 FR 36582**, 17 Jul 1995; 0.5 ppb) is the codification — but its preamble **cites Rulis (1992), not Frawley** (govinfo full-text: no "Frawley" hit). **[CONFIRMED-primary]**. Critics of the principle exist (e.g., "Against the De Minimis Principle," PMC7317961). **[secondary]**.

## 2.4 Conflict of interest

The COI is visible in the documents but was apparently never disclosed as such at the time. Frawley's employer sold the rosin/CMC/packaging chemistry his proposal would deregulate; the supporting data came from **Hercules** (1967 ref. 3) and **IBT** (1967 ref. 26) — IBT being the lab later destroyed by the 1977–83 data-fraud scandal. **No contemporaneous formal COI disclosure beyond his Hercules by-line was located. [CONFIRMED-primary]** that the interest existed; **[absence-of-evidence]** that it was flagged.

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## 3. STRAND II — Congressional / governmental / adversarial appearances

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### 3.1 Did Frawley ever testify before Congress? — No evidence that he did.

- **Aug 1967 Dingell hearing (House Select Small Business, Subcommittee on Activities of Regulatory Agencies)**. The FDA witness was **Commissioner James L. Goddard, not Frawley** — Goddard asked to answer the indirect-additive questions in writing within 30 days and (per Heckman) never did, which is why FDA convened the Feb 1968 conference. **[secondary]** (Heckman first-hand) + **[CONFIRMED-primary]** that the House subcommittee heard a "public witness" on drug-industry matters and that Goddard testified to the *Senate Monopoly* subcommittee that day (Cong. Rec. Daily Digest D406, 10 Aug 1967). *The brief's "LIKELY FALSE" flag on Frawley-testified-at-Dingell is confirmed correct.*
- **1970 Senate "Effects of 2,4,5-T on Man and the Environment" (Hart subcommittee, 7 & 15 Apr 1970)**. The **printed witness index was read directly: Frawley is absent** (grep = 0 hits); the industry witness was **Dow** (Johnson, Blair, Rowe, Lynn); the only Hercules mention is incidental (30 gal of 2,4,5-T for Arizona spraying). **[CONFIRMED-primary]** (NAL full-text PDF).
- **Cyclamate (1969–70), saccharin (1977), pesticide, Agent Orange/veterans hearings**: no Frawley witness or statement located. **[absence-of-evidence]** — most pre-1995 printed witness indexes are not digitized full-view; a definitive negative needs ProQuest Congressional / CIS name-index sweeps.

**Resolved by adversarial verification — and it produced a major new fact.** The loose thread (a UCSF tobacco-collection "Frawley" congressional item) was run down: in **March–April 1994** a "**Statement of John P. Frawley, Ph.D. Before the [House] Subcommittee on Health and the Environment**" was **drafted for the Waxman tobacco hearings** ("Regulation of Tobacco Products," 103rd Cong.). UCSF metadata confirms it is *our* Frawley ("**FRAWLEY JP # HEALTH & ENVIRONMENT INTERNATIONAL LTD,**" Hercules, SOT, ex-FDA), held in the **Tobacco Institute / RJR** legal files, **marked DRAFT with Covington & Burling privilege-log boilerplate.** But the **complete printed record of all seven 1994 hearing dates contains zero "Frawley"** — the statement was **never delivered or entered into the record.** So the "never testified before Congress" finding **stands**, *and* we learn that Frawley spent his last active years as a **tobacco-industry consultant** (UCSF IDL zqxb0104, lhyg0018, hmkb0121, tjhg0001, xhyn0050). **[CONFIRMED-primary]** (UCSF metadata + full 1994 hearing record). See 06\_ANALYTIC\_MEMO Part 4.

### 3.2 Adversarial settings he *did* appear in (courts/depositions)

- In re "**Agent Orange**" Prod. Liab. Litig., MDL 381 — **deposed** and filed an **answering affidavit** for Hercules; both are quoted in **565 F. Supp. 1263** (see Strand III). **[CONFIRMED-primary]**.
- **United States v. Vertac Chemical Corp., 671 F. Supp. 595 (E.D. Ark. 1987)** — a "**Frawley deposition p. 45**" is cited as **PX 213** for Hercules' ~\$60,000/month leachate costs (surname only; almost certainly J.P. Frawley). **[CONFIRMED-primary]** (CourtListener via proxy).
- **Not** named in *O'Dell v. Hercules*, 904 F.2d 1194 (the Jacksonville dioxin trial), nor in the later Vertac opinions (966 F. Supp. 1491; 79/33 F. Supp. 2d). **[absence-of-evidence]** (he could still appear in the sealed trial record).
- **EPA FIFRA 2,4,5-T/Silvex proceedings (Docket 295/415): no record of Frawley as a Hercules witness/affiant;** Dow (V.K. Rowe) was the industry witness. **[absence-of-evidence]** — consistent with the brief's expectation.

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## 4. STRAND III — Hercules, Dow, Monsanto and the dioxin/herbicide nexus

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### 4.1 Hercules's 2,4,5-T / Agent Orange manufacturing

- Hercules **bought the Jacksonville, Arkansas plant in 1961** (later Vertac) and produced **Agent Orange (50/50 n-butyl esters of 2,4-D and 2,4,5-T)** for DoD under contracts **8 May 1964 – 20 May 1968.** **[CONFIRMED-primary]** for the contract dates (565 F. Supp. at 1273); **[secondary]** for the 1961 purchase (Encyclopedia of Arkansas / EPA).
- **Dioxin profile of Hercules product:** per the court record, "very low" at March 1965, then "**no measurable dioxin**" from Jan 1966–May 1970 **except one Sept 1966 test at .1 ppm** — at the very low end of the Vietnam-era

- 2,4,5-T distribution (others up to ~30–50 ppm TCDD). **[CONFIRMED-primary]** (565 F. Supp. at 1273–74) + **[secondary]** (NTP/NAP ranges).
- **Long tail:** the Jacksonville site (≈29,000 abandoned drums; 1979 dioxin-in-fish) became a major Superfund site; Hercules paid **~102.9M(1998) \* \*and \* \*124M (2007)** in Vertac judgments. **[secondary]** (DOJ/Encyclopedia of Arkansas).

#### 4.2 Inter-company dynamics in the record (1949–1965)

- **Monsanto's 1949 Nitro, WV explosion/chloracne** — the court found "Dow must have known" of it; Frawley swore Hercules did not learn of it until Feb 1965. **[CONFIRMED-primary]** (565 F. Supp. at 1269).
- **Feb 1965** — Frawley's sworn first knowledge of 2,4,5-T industrial health problems, from Dow. **[CONFIRMED-primary]** (at 1273).
- **19 Mar 1965 — the crown-jewel document. V.K. Rowe (Dow) wrote to manufacturers of 2,4,5-trichlorophenol, including by name "Dr. John P. Frawley, Hercules Powder Company"** (and Monsanto's Emmet Kelly, Hooker, Diamond Alkali), convening a meeting on "highly toxic impurities" in 2,4,5-trichlorophenol. Read in full. **[CONFIRMED-primary]** — **Poison Papers Bates B 1575 / DocumentCloud 3253794**.
- **24 Mar 1965 — the "Chloracne Problem Meeting" at Dow Midland** (Dow, Diamond Alkali, Hercules, Hooker). Frawley attended and received Dow's analyses showing Hercules's product had "a very low level of dioxin." **[CONFIRMED-primary]** (at 1273). A Hercules memo of the meeting (Poison Papers) records Dow "fearful of a congressional investigation"; Hercules's view that the PHS "would be very happy to get in the act." **[secondary]**.
- **24 Jun 1965 — Dow's V.K. Rowe to Ross Milholland:** dioxin "exceptionally toxic... chloracne and systemic injury," the whole 2,4,5-T industry would be "hard hit" by restrictive legislation, with a "do not reproduce outside Dow" postscript. **[secondary]** (multiple quoters; primary scan not isolated).

#### 4.3 The litigation outcome (and a correction to the brief)

- **565 F. Supp. 1263 (Pratt, J.; order 20 May 1983):** Hercules won summary judgment on the government-contractor defense, resting entirely on Frawley's testimony — the court reasoning that because Hercules's product "was free of the contamination... its knowledge could not have exceeded that of the government." **[CONFIRMED-primary]**.
- **Correction:** Chief Judge Weinstein later **WITHDREW Pratt's opinion** and reinstated the defendants, holding the government-contractor defense could not be resolved before trial; the case then **settled in May 1984** (180Mfund; Hercules's share \* \*18,772,568\*\*). **[secondary → primary]** (procedural recitation in *Hercules v. United States*, 516 U.S. 417). *The SJ "win" was vacated.*
- **Hercules, Inc. v. United States, 516 U.S. 417 (1996):** Hercules could not recover its settlement/defense costs from the U.S. under the Tucker Act. **[CONFIRMED-primary]**.

#### 4.4 The two key letters (full analysis in 06\_ANALYTIC\_MEMO.md)

- **Document A — 3 July 1963 Frawley → Rowe.** Real (paraphrased at 565 F. Supp. 1273: re USDA Dr. John Leary's request to test phenoxy herbicides; per Frawley's affidavit the hazards "relate to 2,4-D, not to 2,4,5-T").  
**PRODUCTION LOCATOR NOW FOUND (2026-06-09):** indexed as exhibit **H281 14-1 5**, "john p. frawley's letter to V. K. rowe of 07-03-63," in a local MDL-381 deposition/exhibit packet (ToxicDocs RBqNnvVrnkZ54xyyyqd90yKV, lines 57656–57680). The **scan itself** is still to be pulled, but this is the first concrete handle. [**CONFIRMED-primary**] (existence/characterization + exhibit locator); [**absence-of-evidence**] (the page image).
- **Document B — 12 July 1965 Frawley internal Hercules memo.**  
**UPGRADED (2026-06-09) from [secondary] to [CONFIRMED-primary] for the wording.** It records a **9 July 1965 telephone call with Earl Farnham of Dow**: "Dow was extremely frightened that this situation might explode"; competitors marketing 2,4,5-T with "alarming amounts of acnegen"; "the whole industry will suffer"; Dow "particularly fearful of a congressional investigation." This verbatim text + exact date/author/subject is now recovered from an **Agent Orange MDL litigation brief** (ToxicDocs jyBDvYGzG58gkKk3VmDbjxLK5, l.14017–14038) and indexed in Poison Papers DowDATA as Bates **A303 / 650712** — *not* the uncited U.S. Veteran Dispatch narrative we previously relied on. **The Bates-stamped memo scan is the remaining target.**

Correction: the "**rabbit-liver study**" detail in the old secondary account appears **nowhere** in the actual memo text → it was a **conflation**. The memo is a Frawley account of a Dow (Farnham) phone call, not a lab study. (The words also appear nowhere in 565 F. Supp. 1263 — the court opinion was never its source.)

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*Continued in 06\_ANALYTIC\_MEMO.md (consistency of the 1983 sworn account vs the 1960s documents; the industrial-role / regulatory-advocacy relationship) and 05\_OPEN\_QUESTIONS.md (next actions, NARA + FOIA drafts, running search log).*