

STATE OF ALASKA

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
3601 "C" STREET, SUITE 1350
ANCHORAGE, ALASKA 99503
(907)563-6529

FAX NUMBER: 562-4026

DATE: Aug 22

TO: Bob Flint

FROM: Rob Waldman

NO. PAGES: 20 TELEPHONE NUMBER:

COMMENTS: Per your request

RECEIVED

AUG 14

SCRO

TO: Signatories for Organizations Participating in the Swanson River Order By Consent

Please sign for your agency or organization on page 12 of all four copies of the order by consent.

Should you have any remaining questions regarding the document, please call Bob Jacobsen at 786-3522. He will coordinate any necessary response.

Either Jacobsen or Howard Metzger will hand carry the documents to the participating organizations for signatures. After all participants have signed, copies will be distributed to all organizations identified for the dissemination list.





IN REPLY REFER TO:

FISH AND WILDLIFE SERVICE
1011 E. TUDOR RD.
ANCHORAGE, ALASKA 99503

United States Department of the Interior

ORDER BY CONSENT
MITIGATION PLAN - SWANSON RIVER OIL FIELD
KENAI NATIONAL WILDLIFE REFUGE

Chevron USA Inc., Swanson River Field Unit Operator, here and after referred to as the Respondent, hereby agrees to fully comply with and execute this ORDER BY CONSENT.

The U.S. Fish and Wildlife Service will administer this ORDER in coordination with the Bureau of Land Management and the Alaska Department of Environmental Conservation, and in consultation with the Environmental Protection Agency, pursuant to:

1. Pertinent regulations of the United States Fish and Wildlife Service (FWS) and Bureau of Land Management (BLM) (43 CFR parts 3100 through 3160), the Unit Agreement for the Development and Operation of the Swanson River Unit Area No. 14-U8-U1-2969 (1956), lease terms and conditions, Special Use Permits, and the authorities thereunder;
2. State of Alaska Department of Environmental Conservation (ADEC), Alaska Administrative Code (AAC), 18 AAC 75.010(a), and the Alaska Statutes AS 46.03.100, AS 46.03.302, AS 46.03.710, AS 46.03.740, and AS 46.03.850;
3. Public Law 96-487 Alaska National Interest Lands Conservation Act (ANILCA) Title III - National Wildlife Refuge System, Section 303(4)(A)(B) and Title VII - National Wilderness Preservation System, Section 702(7);
4. Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA);
5. Federal Water Pollution Control Act (FWPCA), as amended; and
6. All other applicable State and Federal laws.

FINDINGS

1. The Respondent operates the Swanson River Field, an oil and gas production facility on Federal leases in the Kenai National Wildlife Refuge (Kenai NWR), Alaska. The BLM issues the oil and gas leases and regulates drilling and production operations. Use, conservation, and protection of the land, and environmental and biological resources within the Kenai NWR are under the jurisdiction of the FWS.
2. The facility (covering approximately 14 square miles) consists of an administration office and shop buildings, water wells, a compressor complex, storage sites, airfield, producing oil wells, gas injection facilities, oil collection and transferal facilities to pipelines, family residences and approximately 25 miles of unpaved roads.
3. Public vehicular entry to the Swanson River Field is restricted but public access by foot is authorized. Workers on the facility have free access to all areas within the unit boundary. The area is accessible to all wildlife.
4. On July 22, 1984, the FWS sampled soil from the Swanson River Field facility. It was found to be contaminated with polychlorinated biphenyl (PCB) and DDT; elevated levels of certain heavy metals were also found in some samples. Subsequent sampling and chemical analysis by the Environmental Protection Agency (EPA) and the Respondent substantiated some of the initial findings of the FWS. The types and concentrations of materials found (they are hereafter referred to as the "contaminants of concern") are shown on Table 1. The laboratory analysis findings of the EPA and Respondent are given in Tables 2 and 3, respectively.
5. The contaminants found are known to be persistent compounds which can accumulate in the food chains and in the environment, and can be toxic to aquatic organisms, wildlife, and man. Laboratory experiments with animals and bacteria along with limited epidemiological studies of humans suggest that the contaminants are potential carcinogens.
6. Oil-contaminated sand and gravel resulting from incidental oil leaks and/or spillages were deposited on the ground surface at a storage/disposal site referred to as SCU 14-3. SCU 14-3 was established in the early 1970's with the knowledge and consent of the Kenai NWR Manager. Since then, the Respondent has operated the SCU 14-3 site as a repository for oily wastes generated in the course of the production activities of the field.
7. Pursuant to surface oiling permits obtained from the ADEC and approval from the Refuge Manager in 1983 and 1984, the Respondent used oily sand and gravel on certain roads and parking lots of the

facility to control fugitive dust. Prior to the sampling program referred to in finding # 4, neither the Respondent nor the Refuge Manager had any knowledge that the sand and gravel from SCU 14-3 was contaminated with PCB's. The ADEC was not aware at any time that pit SCU 14-3 existed as a repository for oily sand and gravel.

ALLEGATIONS

The State of Alaska Department of Environmental Conservation (ADEC) alleges that:

1. The Respondent is responsible for (1) conducting road oiling activities, (2) operating an oil-contaminated soil storage and/or disposal facility known as SCU 14-3, and (3) operating oil production facilities, all of which are within an area located in the Kenai MNR, commonly referred to as the Swanson River field;

2. During the surface oiling seasons of 1983 and 1984 near Sterling, Alaska, in the Third Judicial District of the State of Alaska, the Respondent applied PCB-contaminated soils to roads in the State of Alaska from a storage or disposal site known as SCU 14-3 in violation of the terms of Surface Oiling Permits issued by the ADEC, which, if true, constitutes a violation of 18 AAC 75.010(a);

3. For the past several years near Sterling, Alaska, in the Third Judicial District of the State of Alaska, the Respondent engaged in the disposal of oily sand and gravel material onto lands in the State of Alaska at a site referred to by the Respondent as SCU 14-3, without first obtaining a waste disposal permit, which, if true, constitutes a violation of AS 46.03.100;

4. For the past several years near Sterling, Alaska, in the Third Judicial District of the State of Alaska, the Respondent engaged in the disposal of oily sand and gravel onto lands in the State of Alaska at a site referred to by Respondent as SCU 14-3, thereby polluting the lands in the State of Alaska, which, if true, constitutes a violation of AS 46.03.710 and AS 46.03.740.

CONCLUSIONS OF LAW, CODIFIED REGULATIONS, AGREEMENTS, AND STIPULATIONS

1. The Swanson River Oil Field is defined as a "facility" under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (42 U.S.C. 9601 et. seq.).

2. Polychlorinated biphenyl (PCB), which was released into the environment, is a "hazardous substance" pursuant to 42 U.S.C. 9601(14).

3. The PCB's found in the soil constitute a "hazardous substance release" into the environment pursuant to 42 U.S.C. 9601(22).

- 4. Any violation of Federal environmental law is, in effect, a violation of the lease terms and is subject to appropriate BLM enforcement action.
- 5. As operator of the Swanson River Field, the Respondent must comply with all statutes and regulations of the State of Alaska.

ORDER BY CONSENT

Based upon the findings and determinations set forth above, it is hereby ORDERED and DIRECTED as follows:

1. Commencement Time. The Respondent is obligated to obey, and to comply with, the terms and provisions of this ORDER as of the "Commencement Time," which date is specified on the signature page of this ORDER.
2. Providing Information to FWS. By not later than 15 days from the commencement time, the Respondent shall deliver in written form to the FWS at Anchorage, Alaska, certain information set out below. The information shall be sent to Robert E. Gilmore, FWS Regional Director, 1011 East Tudor Road, Anchorage, Alaska 99503. The Respondent may assert claims of confidentiality for certain information.

A. A narrative description of operation at the facility including any records of placement of oily sand and gravel within the Swanson River Field. In addition, the description should include any spills of hazardous substances as defined under Section 101(14) of CERCLA which have occurred in the Swanson River Field.

B. An inventory of any item that contains PCB fluids or materials. List by identification number and indicate item concentration, if possible.

C. An inventory identifying petroleum compounds (manufactured products) and hazardous substances (CERCLA) other than PCBs, which are utilized at this facility.

3. Daily Record of Activities. During the pendency of this ORDER the Respondent shall maintain a written record of daily activities under this ORDER. This record shall be available to the On-Scene Coordinator (OSC) upon request. The Respondent shall submit a written summary of its activities to the OSC on a monthly basis. The OSC will be Robert Delaney, Refuge Manager of the Kenai NWR.

4. Providing Site Security. Not later than six (6) calendar days after the commencement time, the Respondent shall begin to enclose the sump pit and stockpile of contaminated soil at the SCU 14-3 site with fencing approved by the OSC which will restrict access by both humans and wildlife. The stockpile will be covered with an USC-approved impervious cover to prevent runoff and leaching. Key points will be posted as determined necessary by the OSC. The posting sign and location areas must meet OSC requirements. Similar site-security measures might also be imposed if results from area-wide sampling reveal additional contaminated sites.

5. Prohibitions. During the pendency of this ORDER, the Respondent shall not:

- A. Allow persons other than the Respondent, employees of the Respondent, and persons designated by the Respondent, FWS representatives, EPA representatives, BLM representatives, and ADEC officials to have access to areas of the facility where materials containing hazardous substances are located. All persons entering the field shall notify the Respondent's field Office.

- B. Transfer or move any PCB-contaminated soil and gravel or other contaminated material from its present location at the facility until authorized by the OSC.

- C. Allow or engage in activities which fail to comply with title 15 U.S.C. 2601 et seq. (TSCA), 42 U.S.C. 6901 et seq. (RCRA), 42 U.S.C. 9601 et seq. (CERCLA); title 40, Code of Federal Regulations, Parts 761, 263, and 265; title 49 Code of Federal Regulations, Part 177; and title 43 Code of Federal Regulations, Parts 3000, 3100, and 3160.

- D. Perform any activities related to this ORDER not authorized by the OSC or not previously authorized in writing by the FWS.

- 6. Safety. In carrying out the provisions of this ORDER, the Respondent shall provide for the immediate safety and health of workers and other authorized persons, as well as for protection of the environment and associated fish and wildlife.

MANDATORY REQUIREMENTS/COMPLIANCE SCHEDULE

The Respondent shall conduct each of the following activities within the specified period for compliance:

- 1. Within thirty (30) days of commencement time, designate, retain, and/or employ a person acceptable to the FWS who is qualified by education and experience to design, implement, and supervise all activities listed in this paragraph.

- 2. Within forty (40) days of commencement time, prepare and submit Sample Collection Plan which will meet the following goals:

- A. Identify those areas within the Swanson River field where remedial action is required; and
- B. assess the impact, if any, that the contaminants of concern have had on fish or wildlife in the Refuge.

The Sample Collection Plan shall be prepared in accordance with the following guidelines:

- a. Soil and aquatic sediments: samples should be collected from locations within the facility where contaminants of concern may have been collected, stored, spilled, discharged, or applied, including:

- 1) P&S Warehouse and Yard Area and associated drainage
- 2) 1-337S Area and associated drainage
- 3) Compressor plant facility and associated drainage
- 4) Areas upon which contaminated road surfacing material was applied for dust control and associated drainage
- 5) Area and associated drainages surrounding the SCU 14-3 sump and stockpile
- 6) Any other areas of concern designated by the OSC.

- b. Groundwater: samples should be collected from wells installed in the vicinity of SCU 14-3.

- c. Biota: samples from representative species (i.e., terrestrial avifauna and mammalian fauna living in close association with the ground and/or soil environment; selected fish, aquatic gastropods and bivalves) should be collected at locations selected on the basis of Figure 1.

Specific sampling locations shall be identified and justified in the Sample Collection Plan, and shall include a number of locations selected for the purpose of establishing background levels.

The Sample Collection Plan shall be submitted to FWS for approval.

- 3. Within forty-five (45) days of commencement time, prepare and submit a Sample Analysis Plan which shall include:

- A. Standard analytical methods used by approved laboratories for determining the contaminants of concern in soil, suspended and deposited aquatic sediments, surface and ground waters and organs and tissues of selected terrestrial and aquatic organisms.
- B. Analysts of not less than the following:

a. "Natural Background" Sampling Sites

1) PCB, DDT, and Metabolites

2) Metals:

- Arsenic
- Lead
- Cadmium
- Mercury
- Chromium
- Nickel
- Copper
- Zinc

b. Swanson River Field Sampling Sites

1) PCBs (all arachnors)

DDT and Metabolites

2) Metals

8 metals, same as for Natural Background

3)

2, 3, 7, 8 tetrachlorodibenzodioxin; 2, 3, 6, 7
tetrachlorodibenzofuran

Five samples from segregated sites in the area around
the compressor plant.

c.

A laboratory selected by mutual consent will be used by the
Respondent for conducting analysis of contaminants of concern.
It is agreed that the FWS Hazardous Wildlife Research Center
Laboratory will insure "Laboratory Quality Assurance" control of
the approved laboratory. Quality control effort shall include
but not be limited to a review and approval of laboratory
analytical technique, sample checks, dual sampling (10% split
sampling), sampling procedures and sample handling.

d.

All samples sent to the approved laboratory shall be analyzed
for contaminants of concern on a dry weight basis for soil and
sediment and on a wet weight basis for all biological samples.
The analyses must be performed according to methods deemed
satisfactory to the FWS. The results of these analyses shall be
submitted to Howard Metsker, U.S. Fish and Wildlife Service,
1011 East Tudor Road, Anchorage, Alaska 99503.

e.

Analytical results must meet performance criteria acceptable to
the FWS. Failure to meet these criteria can result in the
Respondent having to reanalyze the samples or perform additional
sampling.

f.

The Sample Analysis Plan shall be submitted to the FWS for
approval.

g.

The Respondent shall conduct the required sampling as specified
in the approved Sample Collection Plan.

4. Within ninety (90) days of submission of final analytical results, the Respondent shall submit to the FWS and ADEC a Mitigation and Restoration Plan for the Swanson River Field. This plan shall be implemented as amended and approved by the FWS and ADEC. Respondents shall have the right to participate in all FWS and ADEC discussions concerning amendments and approval of the plan.
- A. The mitigation and restoration plan must be based upon:
 - a. Assessment of the results from the sample collection and analysis specified in items 2 and 3.
 - b. An environmental quality standard for the protection of the Refuge based on a risk assessment to be performed by the Respondent and approved by the FWS and ADEC.
- B. The mitigation and restoration plan requirements for the handling and disposal of contaminated material must include the following:
 - a. Within thirty (30) calendar days of the signing of this ORDER, the Respondent shall prepare for ADEC and FWS approval a plan for stabilizing and containing those areas presently known to contain over 50 ppm PCB, including the SCU 14-3 sump and stockpile. Said plan must provide measures for preventing any contaminants from migrating into surrounding soil or coming into contact with surface or ground waters. Following approval, this plan shall be executed expeditiously, but no later than December 31, 1985. Within 150 days of approval of the mitigation and restoration plan, but in no event later than December 31, 1986, the Respondent shall eliminate all material found to be contaminated over 50 ppm in the manner approved by the ADEC and FWS in the mitigation and restoration plan.
 - b. Other contaminated materials found to exceed the standards of this ORDER must be removed for containment in accordance with a schedule to be included in the Pollution Mitigation Plan.
 - c. Plans for removal and containment of any contaminated materials must be reviewed and approved by the FWS, in consultation with BLM, ADEC, and EPA, prior to such removal.
 - d. Storage and disposal will be in accordance with Federal and State laws and regulations. Plans for said storage and disposal shall be submitted to the FWS for review and approval.
5. Amendment of Annual Development Plan. The Respondent's complete plan, developed in response to this ORDER, shall be submitted to the FWS and BLM as an amendment to Chevron's Annual Plan of Development and Operation for the Swanson River Field.

6. Compliance with All Laws. In performing activity directed by this ORDER, the Respondent shall comply fully with all requirements of applicable Federal, State, and local laws. No provisions of this ORDER operate to excuse the Respondent from complying fully with all other environmental laws and regulations.

7. Miscellaneous.

A. The provisions of this ORDER shall obligate this Respondent and all successors and assignees of the Respondent. If the Respondent transfers, sells, assigns, or leases this facility prior to its fulfillment of the provisions of this ORDER by CONSENT, the Respondent must incorporate a copy of this ORDER into the documents of transfer, sale, assign or lease, and must provide in those documents that the new owners or lessees will take or lease subject to compliance with this ORDER BY CONSENT.

B. This ORDER is entered into by the Respondent voluntarily for the purpose of avoiding unnecessary conflict or litigation over this matter. In consideration thereof, the FWS, BLM, and ADEC agree not to pursue any other civil, criminal, or administrative relief, including penalties, against the Respondent, or its successors or assignees, in connection with this matter so long as the provisions of this compliance ORDER BY CONSENT are met; except that the FWS, BLM, or ADEC shall be entitled to seek enforcement of this ORDER by a court of competent jurisdiction. Nothing in this ORDER shall be construed to any extent or for any purpose, however and whenever arising, as an admission of liability or violation, directly or indirectly, on the part of the Respondent, its successors, or assignees.

C. No provision of this ORDER affects any right, claim for relief, or cause of action held by persons other than the Respondent, FWS, BLM, and ADEC.

D. The provisions of this ORDER may only be modified or amended upon the express written consent of the Respondent, FWS, BLM, and ADEC.

This document will be recognized by the Respondent as a Compliance Order by Consent under Alaska Statutes 46.03.950 and under the jurisdiction of the State of Alaska.

8. Opportunity to Confer. The Respondent may at any time request to confer with the FWS concerning the terms and provisions of the foregoing ORDER. All requests to confer shall be confirmed in writing and justified. In any such conference held pursuant to a

request of the Respondent, attorneys and other representatives of the Respondent may be present and may present on behalf of the Respondent whatever objections, contentions, comments, or requests the Respondent may have. Requests for any such conferences should be addressed to:

Robert E. Gilmore, Regional Director
U.S. Fish and Wildlife Service, Region 7
1011 East Tudor Road
Anchorage, Alaska 99503
PH: (907) 786-3542

The Respondent acknowledges, by execution of this Consent Order, that it is waiving rights which would attach otherwise to the procedure for issuance of a compliance order under 18 AAC 95, including the right to an adjudicatory hearing and judicial review of the Alaska State Department of Environmental Conservation's findings in this matter, and that these rights are knowingly and voluntarily waived.

9. Cost Recovery. The Respondent shall be responsible for all appropriate costs authorized by the OSC in connection with the implementation of this ORDER. The OSC will provide the Respondent with an itemized accounting of all expenses authorized pursuant to this ORDER.

10. Organization of Response.

A. The organization chart (Figure 2) identifies the structure of the response team and interactive coordination between the OSC, Federal and State agencies, and the Respondent.

B. The Respondent has the first responsibility to take all appropriate action to remove the contamination and restore the environmental quality of the affected areas.

C. The FWS has the primary responsibility to insure that all response actions are performed in a manner least disturbing to the environmental and biological integrity of the surrounding refuge. All activities must be performed under the supervision and full approval of the OSC.

D. The FWS shall serve as the public relations coordinator in connection with this matter, and will respond to inquiries from the public on cleanup efforts. The Respondent shall have the right to review and comment upon any written statements which the FWS proposes to make to the public or news media.

E. Procedures and guidelines shall conform to the "National Oil and Hazardous Substances Contingency Plan" as amended.

U.S. DEPARTMENT OF THE INTERIOR, FISH AND WILDLIFE SERVICE

Concur: Robert E. Gilmore
Regional Director
Date: 7/31/85

U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT

Concur: M.J. Pentold
State Director
Date: 7-31-85

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Concur: Bill Lamoreaux
Regional Supervisor
Date: 7/31/85

CHEVRON USA INC.

Concur: J. T. Cameron
Vice President
Western Region E&P
Date: 8/6/85

CHEVRON USA INC.
COMMENCEMENT TIME OF THIS ORDER SHALL BE

August 6, 1985
Date

Lab. Analytical Laboratory, results of the first and second samples taken by the first and second service units on 22, 1988. The drainage below the sumi tank at the first and second service units.

Compound	Lead	Copper	Zinc	Cadmium	Chromium	Mercury	Arsenic	Selenium
Lead	18.	29.	29.	930.	1.9	47.	5.9	-0-
Copper	28.	21.	100.	0.56	270.	0.18	5.0	-0-
Zinc	0.11	0.003	0.22	-0-	0.081	0.017	-0-	-0-
Cadmium	8.2	19.	100.	-0-	NA	4.7	-0-	-0-
Chromium	0.020	0.002	-0-	-0-	-0-	0.001	-0-	-0-
Mercury								
Arsenic								
Selenium								

Road Sediment 84-M-2350
 SCU 14-3 Supp. Water 84-M-2353
 Drainage Basin Supp. Water 84-M-2354
 Sediment 84-M-2352

Compound	p,p'-DDE	p,p'-DDD	p,p'-DDT	Dieldrin	Heptachlor epoxide	Orychordane	cg-Chlordane	trans-nonachlor	Endrin	γ-HCH	γ-PCB
p,p'-DDE	-0-	-0-	-0-	0.70	-0-	-0-	-0-	-0-	-0-	-0-	-0-
p,p'-DDD	-0-	-0-	-0-	0.11	-0-	-0-	-0-	-0-	-0-	-0-	-0-
p,p'-DDT	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
Dieldrin	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
Heptachlor epoxide	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
Orychordane	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
cg-Chlordane	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
trans-nonachlor	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
Endrin	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
γ-HCH	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
γ-PCB	35.	10.	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-

NA = Not Analyzed
 -0- = None Detected
 PPM Dry Weight for Metals in Sediment
 (PPM wet weight - for metals in water and for organochlorine compounds)

Table 2. Environmental Protection Agency Swanson River Field Analytical Results Summary, Chevron Spill Samples Collected March 5, 1985

Sample #	Location
100676 - soil	200 feet from lower housing road
100677 - soil	Main intersection north of office to plant
100678 - soil	West side maintenance shop
100680 - soil	Junction from main road to compressor
100681 - soil	Stockpile at SCU 14-3
100682 - soil	Collection pit
100683 - soil	Gravel pit
100684 - soil	Landing strip
100675 - water	Pumphouse water supply
100679 - water	Control building - water fountain

Mercury (ug/l)	Silver (ug/l)	Arsenic (ug/l)	Barium (ug/l)	Cadmium (ug/l)
0.05u	0.1u	9	151u	0.7
0.05u	0.1u	20	1690	1.9
0.05u	0.1u	154	2800	21.6
0.05u	0.2	7	2380	11.3
0.05u	0.1u	10	2070	12.9
0.05u	0.1u	201	340	7.1
0.05u	0.1u	8	330	0.2
0.05u	0.1u	14	1050	2.3
0.1u	0.1u	7	10u	0.2
0.1u	0.1u	7	10u	0.2

Chromium (ug/l)	Lead (ug/l)	Selenium (ug/l)	PCB (ug/kg)	DDT (ug/kg)
0.05u	0.1u	9	151u	0.7
0.05u	0.1u	20	1690	1.9
0.05u	0.1u	154	2800	21.6
0.05u	0.2	7	2380	11.3
0.05u	0.1u	10	2070	12.9
0.05u	0.1u	201	340	7.1
0.05u	0.1u	8	330	0.2
0.05u	0.1u	14	1050	2.3
0.1u	0.1u	7	10u	0.2
0.1u	0.1u	7	10u	0.2

100676 1u 140 (1248) 1u 140 (1248) 3u 140 (1248) NSQ
 100677 1u 860 (1248) 2u 860 (1248) 200u 200u NSQ
 100678 2u 103 (1248) 4u 103 (1248) 4000u 4000u NSQ
 100680 19u 57500 (1248) 4000u 3700u NSQ
 100681 17u 134000 (1248) 3700u 3700u NSQ
 100682 388u 2050u 7400u 7400u NSQ
 100683 1u 98800 (1248) 0.5u 0.5u NSQ
 100684 1u 104 (1248) 5u 5u NSQ
 100675 7u 64 (1248) NSQ
 100679 1u 1u NSQ

u = Detectable Units
 NSQ = Not Sufficient Quantity

REVISED 11/81
 SWANSON RIVER
 ROAD MAP
 FOR GENERAL USE
 STANDARD OIL COMPANY OF
 KENTON, OHIO
 1981

LEGEND
 ROAD IN GENERAL USE AND
 MAINTAINED
 ROAD NOT IN GENERAL USE -
 NOT MAINTAINED OR ABANDONED

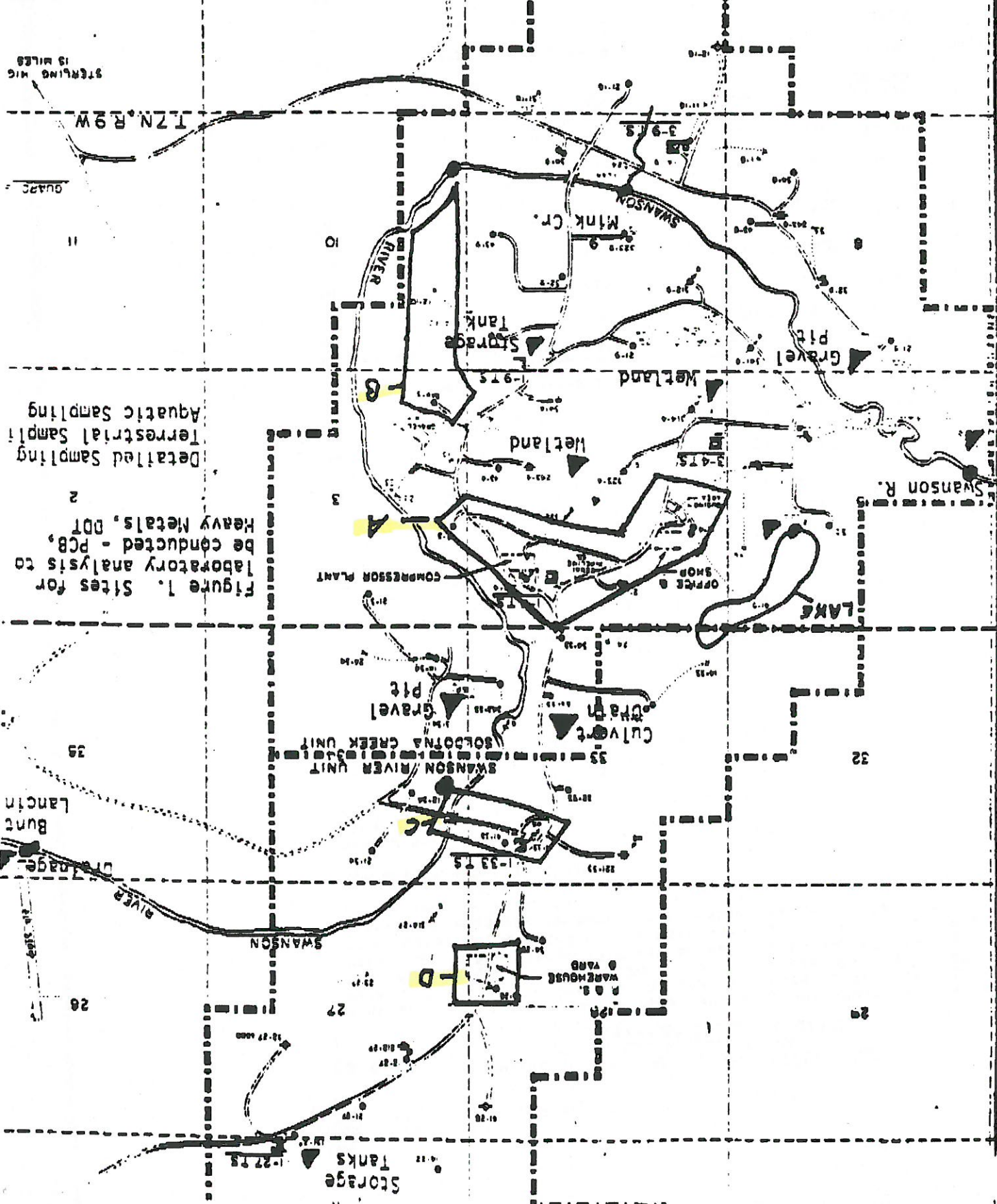
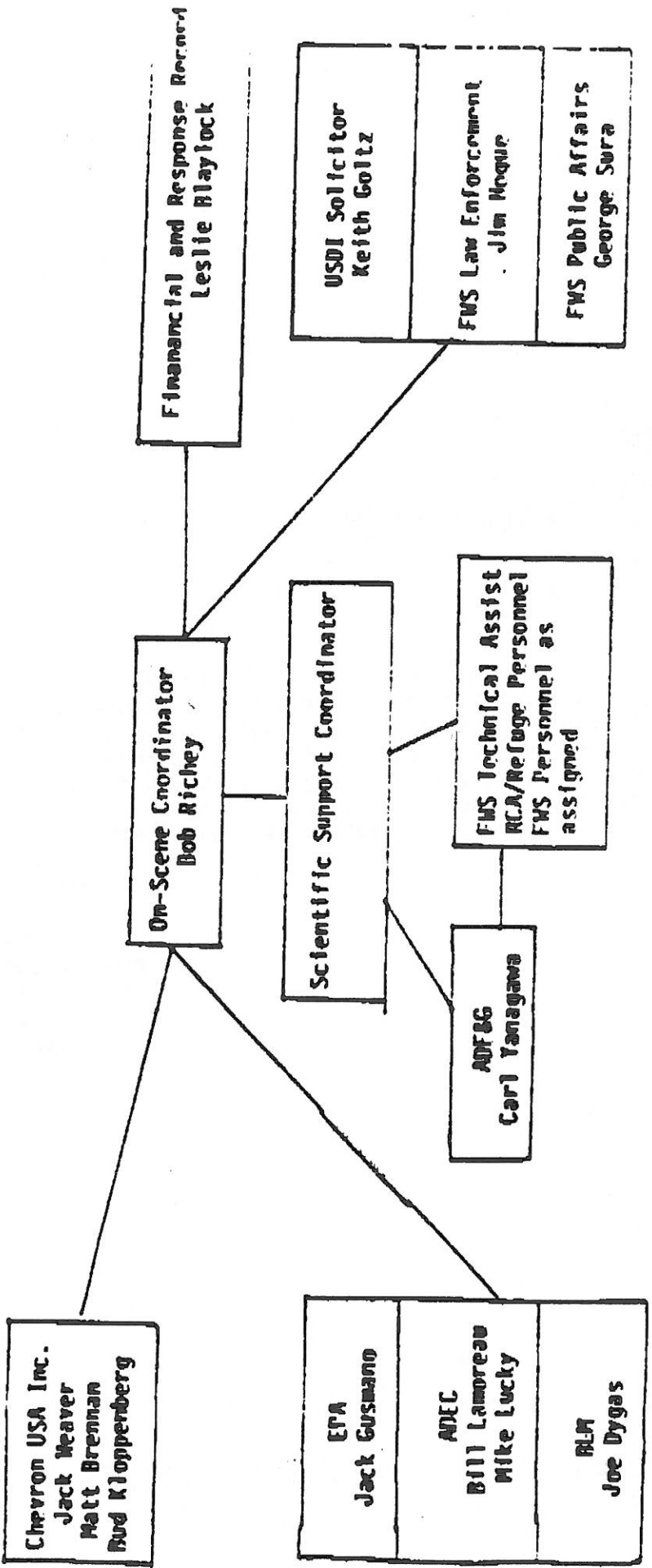


Figure 1. Sites for laboratory analysis to be conducted - PCB, Heavy Metals, DDT, Detailed Sampling, Terrestrial Sampling, Aquatic Sampling

STERLING 15 MILES
 TZN.R.9W
 GUARD

Figure 2. DECONTAMINATION OF SWANSON RIVER FIELD
Kenai National Wildlife Refuge
Response Team Organization



08. 22. 88 09: 09 AM *ADFC ANC 7 5624026 P20

William Burch F.R.

United States Department of the Interior

**FISH AND WILDLIFE SERVICE
1011 E. TUDOR RD.
ANCHORAGE, ALASKA 99503**



**ES
IN REPLY REFER TO:**

AUG 26 1986

**Mr. W. A. Brommelstek
Chevron U.S.A. Inc.
P. O. Box 5043, Room E 1104
6001 Bollinger Canyon Road
San Ramon, CA 94583**

Dear Mr. Brommelstek:

The attached agreement was reached at a meeting between representatives of the U.S. Fish and Wildlife Service, Environmental Protection Agency, Bureau of Land Management, Alaska Department of Environmental Conservation and Chevron USA, Inc. (Chevron) on August 15, 1986, concerning the standard to be applied at the Swanson River oil field, Kenai National Wildlife Refuge for the cleanup of polychlorinated biphenyls. Chevron was represented by Mr. William Brommelstek and Mr. Matt Brennan.

William Burch
Sincerely,
William Burch
Regional Director

Attachment

cc: Mr. M. K. Hauser

Memorandum of Agreement for
Cleanup of Polychlorinated Biphenyls (PCB's) from
Swanson River Oil Field, Kenai National Wildlife Refuge
by Chevron U.S.A., Inc.

It is agreed that all PCB-contaminated areas will be cleaned to a level of 12
ppm or less with the exception of two areas: 1) the pipeline area,
encompassing an area of approximately 30 feet by 150 feet, and 2) the SCU 14-3
pit site will be restored to a level of 24 ppm or less. For the remaining
acre of the field, Chevron will periodically monitor the SCU 14-3 pit site for
possible PCB migration which has resulted from their previous activities at
this site. If monitoring shows PCB contaminant migration, Chevron will be
responsible for further remedial action at the SCU 14-3 pit site.

Concur: *[Signature]*
Regional Director, U.S. Fish and Wildlife Service
Date 2/26/86

Concur: *[Signature]*
Acting State Director, U.S. Bureau of Land Management
Date 8-27-86

Concur: *[Signature]*
Assistant Regional Administrator
Environmental Protection Agency
Date

Concur: *[Signature]*
Regional Director, Alaska Department of Environmental
Conservation
Date 9-03-86

Concur: *[Signature]*
Chevron USA, Inc.
Unit Operator, Swanson River Field
Date

