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SYRDAL, DANELO,
KLEIN, MYRE & WOODS, P.S.
DEPARTMENT OF ECOLOGY

JUL 04 1988

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
SEATTLE, WASHINGTON

9 IN THE MATTER OF:)
 10) Docket No. 1088-03-13-106
 11 CITY OF SPOKANE,)
 12)
 13 Respondent.) ORDER ON CONSENT
 14)
 15 Proceedings Under Section 106)
 16 of CERCLA, 42 U.S.C. § 9606.)
 17)
 18 _____)

1. INTRODUCTION

This Order is issued to the Respondent named above by the United States Environmental Protection Agency (EPA) pursuant to Section 106 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended by the Superfund Amendments and Reauthorization Act of 1986, (CERCLA), 42 U.S.C. § 9606. By signing this Order, the Respondent ("City of Spokane" or "Spokane") consents to its issuance.

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2. JURISDICTION

This Order is issued pursuant to the following:

- A. Authority conferred on the President by Section 106(a) of CERCLA, 42 U.S.C. §9606(a);
- B. Authority conferred on the Administrator of the United States Environmental Protection Agency (EPA) by Executive Order 12580 dated January 29, 1987, published in Volume 52, Federal Register, page 2923;
- C. Authority conferred on the EPA Regional Administrators (RAs) by EPA Delegations Manual Section 14-14-C; and
- D. Authority conferred on the EPA Region 10 Director, Hazardous Waste Division, by a Regional Redlegation Order signed by the Regional Administrator.

3. STIPULATIONS

By the signature appearing below, Spokane hereby consents and agree to:

- A. the issuance of this Order;
- B. perform and comply with Spokane's obligations as specified in this Order;
- C. not contest or legally challenge the issuance of this Consent Order or EPA's jurisdiction to enforce this Consent Order; and
- D. the fact that EPA has determined that there may be an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance as set forth below.

4. EPA NOT BOUND TO ACT

Any conduct by EPA described herein by means of the words "will," "may," "expects to," etc., does not create a promise, undertaking, or any

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1 legal duty on the part of EPA. Instead, any such expressions indicating an
2 act or omission contemplated on the part of EPA, shall operate (at most, and
3 only if legally appropriate) only as a condition precedent to a duty of
4 Spokane to perform some act or to refrain from acting, as appropriate under
5 the terms of this Order.

6 5. JUDICIAL REVIEW

7 Nothing in this Order shall make a matter judicially reviewable prior
8 to the commencement of judicial proceedings by or on behalf of EPA which
9 pray for relief in the form of:

- 10 A. Specific enforcement of this Order;
11 B. Civil or criminal sanctions provided by statute for violation of
12 the terms of this Order;
13 C. A declaratory judgment; or
14 D. A decree of exoneration of reimbursement.

15 PURPOSES OF ORDER

16 To determine thoroughly the nature and extent of the risks or threats,
17 if any to the public health or welfare or the environment in accordance with
18 the provisions of 42 U.S.C. §9604 and applicable regulations. This
19 determination shall address the facility, known as the Northside Landfill,
20 as identified in the listing of the site on the National Priorities List.
21 All activity toward this objective is called a Remedial Investigation or
22 RI. RI activities shall include consideration of and take into account any
23 available relevant studies or reports.

1 B. To evaluate the alternatives currently available for remedial
2 action which will, to an appropriate extent, prevent and/or ameliorate the
3 effects of any release or further release, of any hazardous substances,
4 pollutants, or contaminants at or from the facility. State requirements
5 which are applicable or relevant and appropriate will be considered in this
6 evaluation pursuant to Section 121 of CERCLA, 42 U.S.C. §9621. All activity
7 toward this objective is called a Feasibility Study ("FS").

8 C. The exact boundary of the facility may be adjusted during the
9 conduct of the RI/FS, to conform to the definition of facility in 42 U.S.C.
10 §9601(9). The definition of facility allows the site to include all of the
11 area impacted by the site. Adjusting the boundaries will be addressed in
12 the RI/FS, to be submitted pursuant to this Order.

13 D. To accomplish the foregoing objectives in a manner consistent with
14 the Nation Contingency Plan (NCP), 40 CFR Part 300, 50 Fed. Reg. 47912
15 published on November 20, 1985, and the Comprehensive Environmental
16 Response, Compensation, and Liability Act, as amended by the Superfund
17 Amendments and Reauthorization Act of 1986 ("SARA").

18 7. FINDINGS OF FACT AND CONCLUSIONS OF LAW

19 A. The Northside (or North) Landfill covers 175 acres of a 345-acre
20 facility in the extreme northwest part of the City of Spokane. The landfill
21 is about one-half mile east of the Spokane River and located partly in the
22 lowlands of the river valley and along the bluff of Five Mile Prairie.

23 B. The Northside Landfill has been operated by the City of Spokane
24 since the 1930s. The site was operated as an open burning facility into the
25 1950s. In the 1960s, open burning was phased out and waste disposal shifted
26 to a combination of area fill and shallow excavation. In the mid-1960s,
27 open-burning ended and landfilling using soil cover was instituted. This
28 practice continues today.

1 C. In 1982, the city began groundwater monitoring of on-site and
2 selected nearby domestic wells. The wells were found to be contaminated
3 with landfill leachate components and volatile organic compounds (VOCs)
4 including tetrachloroethylene, trichloroethylene, and trichlorethane. The
5 above chemicals and some other substances found on-site are hazardous
6 substances pursuant to CERCLA, and are known toxicants.

7 D. In response to the October 1983 discovery of VOC contamination
8 identified by the CH₂M/Hill studies and because of concerns about public
9 health and the substantial damage claim potential for the city, the City of
10 Spokane extended water service to 50 affected homes northwest of the
11 landfill. At the same time, the City began quarterly well sampling to
12 monitor the movement of the VOC plume.

13 E. Part of the Northside Landfill overlies the Spokane Valley-Rathdrum
14 Aquifer, designated by the EPA as a "sole source" aquifer. In 1983 it was
15 discovered by hydrogeologic studies and groundwater monitoring that VOCs
16 contamination of this aquifer is taking place. Northside Landfill has been
17 shown to be a major source of the aquifer contaminants.

18 F. Two Preliminary Assessment Surveys of the site were conducted in
19 1980 and 1984 by EPA. The results were used to nominate the Northside
20 Landfill for the National Priorities List (NPL) in October 1984 and list it
21 in June 1986.

22 G. Pursuant to a Memorandum of Agreement with the Washington State
23 Department of Ecology ("Ecology") the City of Spokane submitted a draft
24 remedial investigation to Ecology in October 1986 and a draft Feasibility
25 Study in June 1987.

26 H. The site is a facility as defined in Section 101(9) of CERCLA,
27 42 U.S.C. §9601(9).

28 I. The Respondent is a person as defined in Section 101(21) of CERCLA,
42 U.S.C. §9601(21).

1 J. Certain wastes and constituents at the site are hazardous
2 substances as defined in 101(14) of CERCLA, 42 U.S.C. §9601(14).

3 K. The past, present, and potential migration of hazardous substances
4 from the site constitutes an actual or potential release as defined in
5 Section 101(22) of CERCLA, 42 U.S.C. §9601(22).

6 L. The City of Spokane is an owner and operator pursuant to Section
7 107(a)(1) and (2) of CERCLA, 42 U.S.C. §9607(a)(1) and (2).

8 M. The Respondent shall carry out all actions required by this Order
9 unless indicated otherwise:

10 N. On the basis of past inspections, investigations and reports, and
11 all other available information, the Regional Administrator of EPA has
12 determined that (pursuant to Section 106 of CERCLA, 42 U.S.C. §9606) there
13 may be an imminent and substantial endangerment to the public health or
14 welfare or the environment because of an actual or threatened release of a
15 hazardous substance from the site herein described.

16 O. Under Section 106 of CERCLA, 42 U.S.C. § 9606, the Regional
17 Administrator has been delegated the authority to issue orders to secure
18 such relief as may be necessary to protect the public health or welfare and
19 the environment.

20 ORDER

21 Based on the foregoing FINDINGS OF FACT and CONCLUSIONS OF LAW, it
22 is hereby ORDERED as follows:

23 8. DESIGNATION OF PROJECT COORDINATORS

24 Not later than five (5) days after the effective date of this Order,
25 Spokane and EPA each will designate a Project Coordinator and a substitute.

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3 Each Project Coordinator will have the day to day responsibility for
4 overseeing the implementation of this Order. To the extent possible, all
5 communications between Spokane and EPA (including communication by letter,
6 reports, notices, etc.) concerning activities related to this Order shall be
7 directed through the respective Project Coordinators.
8

9 9. CHANGING PROJECT COORDINATORS

10 Either EPA or Spokane may change their respective Project Coordinators
11 by notifying the other in writing no later than five (5) calendar days
12 before the date of such change.
13

14 10. DIRECTOR AND CONTRACTORS

15 Except as otherwise agreed to by EPA and Spokane, all Spokane activity
16 in implementation of the RI/FS pursuant to this Order shall be supervised by
17 the Project Coordinator for the City of Spokane. Prior to commencement of
18 applicable RI/FS activities at the site, Spokane shall notify the EPA in
19 writing of: the name, address, qualifications, and affiliations of all
20 contractors and subcontractors expected to be used in performing activities
21 to carry out the provisions of this Order.
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11. DISTRIBUTION OF ORDER

Spokane shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants retained to conduct any portion of the work performed pursuant to this Order, not later than fourteen (14) calendar days after the effective date of this Order or the date of such retention, whichever is later.

12. DEVELOPMENT AND SCOPE OF RI/FS WORK PLAN

A. Spokane shall implement the tasks detailed in the Remedial Investigation/Feasibility Study Work Plan set forth in Appendix "A" hereto in accordance with the deadlines specified in Appendix "B" or as those tasks or deadlines may be modified in accordance with the procedures set forth in paragraphs 16, 28, and/or 29, below. Spokane shall carry out the Work Plan and any subsequent modifications to the Work Plan in accordance with applicable EPA Remedial Investigation/Feasibility Study guidance which EPA will provide to Spokane and with the standards, specifications, and schedule set forth in the Work Plan and Appendix "B".

13. CONSISTENCY WITH NATIONAL CONTINGENCY PLAN

All of Spokane's actions in compliance with this Order shall be consistent with Subpart F of the National Contingency Plan (40 C.F.R. Part 300.61-300.71) in effect on the effective date of this Order, and the Comprehensive Environmental Response, Compensation and Liability Act, as amended by SARA.

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14. COMMENCEMENT OF WORK

Not later than seven (7) calendar days after the effective date of this Order, Spokane shall commence work in accordance with the RI/FS Work Plan.

15. DESIGNATION OF ON-SCENE COORDINATOR

In accordance with the criteria and procedures set forth in the National Contingency Plan and any amendments thereto, EPA may designate one or more persons as a "On-Scene Coordinator" for the facility and activities mentioned in this Order, who will have the authority specified in the National Contingency Plan. Such authority includes authority to halt work on activities required by this Order, to direct any tasks so required, and to take any response action appropriate if the On-Scene Coordinator determines that conditions may present an immediate and significant risk to the public health or welfare or the environment. Nothing in this Order shall be construed to diminish that authority. The On-Scene Coordinator may authorize minor field deviations which will be documented in writing and signed by both Spokane's Project Coordinator and EPA's On-Scene Coordinator within five (5) working days of authorization. The EPA Project Coordinator may be, but need not be, an On-Scene Coordinator.

16. ABSENCE OF EPA COORDINATOR(S)

The absence of the EPA Project Coordinator and/or On-Scene Coordinator from the site may not constitute an excuse for halting the work required under this Order.

17. QUALITY ASSURANCE

Throughout all sample collection, transportation, and analysis

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1 activities carried out pursuant to this Order, Spokane shall use the
2 procedures for quality assurance, quality control, and chain of custody
3 specified in or incorporated by the Quality Assurance Project Plan.
4

5 18. NOTICE TO EPA OF EXCAVATION, DRILLING OR SAMPLING

6 Spokane shall notify EPA of any excavation, drilling, or sampling to be
7 conducted pursuant to this Order at least five (5) working days in advance
8 of any such activity and shall, upon EPA's verbal request, provide EPA with
9 a split or duplicate of any sample taken pursuant to this Order. Spokane
10 shall not use any portion of the site in any manner that would adversely
11 affect the monitoring wells that are currently at the site or that will be
12 installed pursuant to the RI/ FS without first receiving written permission
13 of the EPA Project Coordinator.

14 19. EPA OVERSIGHT OF QUALITY ASSURANCE

15 With regard to all sample collection, transportation, or analysis
16 required by the RI/FS Work Plan, Spokane shall:

17 A. Conduct all sampling and analysis in accordance with the specific
18 requirements by the RI/FS Work Plan (EPA may require Spokane to revise the
19 Sampling and Analysis Plan to comply with EPA's sampling and analysis
20 protocols, regulations, and guidance.)

21 B. Allow EPA and state personnel and EPA and state authorized
22 representatives access during normal working hours to information collected
23 under the RI/FS Work Plan, including (1) each laboratory and laboratory
24 worker employed or used by Spokane for collection or transportation or
25 analysis of samples pursuant to the RI/FS Work Plan, and (2) every

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1 laboratory record and item of equipment used in connection with the
2 collection or analysis of samples pursuant to the RI/FS Work Plan;

3 C. Ensure that each laboratory used by Spokane for analyses performs
4 such analyses according to the methods specified in the RI/FS Work Plan.
5

6 20. EPA ACTIVITIES AT SITE

7 EPA and the state will have the authority to enter and move freely
8 about all portions of the site at all reasonable times for the purpose of,
9 among other matters:

10 A. inspecting records, operating logs, and documents related to the
11 RI/FS Work Plan activities or work at the site;

12 B. reviewing Spokane's progress in carrying out this Order;

13 C. conducting such RI/FS Work Plan-related tests as EPA deems
14 necessary;

15 D. using a camera, sound recorder or other equipment; and

16 E. verifying the data submitted to EPA by Spokane. Spokane shall
17 permit such persons to inspect and copy records, files, photographs,
18 documents, and data, pertaining to work undertaken pursuant to this Order.
19 Spokane may accompany EPA and state representatives when they are on site.
20

21 21. RETENTION OF RECORDS

22 Spokane shall preserve all records and documents in possession or
23 control of its divisions, employees, agents, accountants, or contractors,
24 which relate in any way to the RI/FS Work Plan activities to be identified
25 at the site for at least seven (7) years from the date of termination of
26 this Order, despite any document retention policy to the contrary. Upon
27 request by EPA or the state, Spokane shall make available to EPA or the
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1 state such records or true copies of any such records. Any destruction of
2 records after this seven (7) year period shall not be done without prior
3 notice to and approval of EPA.
4

5 22. PROVISION OF OTHER DOCUMENTS

6 Upon EPA's written request, Spokane shall provide EPA with a copy of
7 other documents obtained or prepared by Spokane pursuant to its
8 implementation of this Order, including draft and final plans, draft and
9 final task memoranda (including memoranda recording minor field
10 modifications), recommendations for further action, quality assurance
11 memoranda and audits, draft and final reports, raw data, field notes,
12 laboratory analytical reports and any studies relevant to, but not
13 specifically required by, this Order. Internal communications not produced
14 in furtherance of this order and not otherwise available to the public on
15 demand may be subject to claims of confidentiality by the City of Spokane.
16

17 23. PROGRESS REPORTS

18 Commencing with the first month following the effective date, Spokane
19 shall deliver to EPA and the state monthly written progress reports
20 concerning the implementation of this Order. At a minimum, the progress
21 reports shall: (a) describe the actions which have been taken to implement
22 this Order during the previous month, (b) include the results of any
23 sampling and tests and any other data received by Spokane pursuant to this
24 Order, and (c) describe all actions to implement this Order scheduled for
25 the next month. Spokane shall submit these reports to EPA every month by
26 the tenth (10th) day of the month. Any report to which there remains any
27 unresolved EPA objections, unless remedied to EPA's satisfaction, shall fail
28 to satisfy the duties imposed upon Spokane by this paragraph.

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24. PRELIMINARY AND FINAL REPORTS

Respondent shall provide preliminary and final reports and other items described as "deliverables" in the RI/FS Work Plan.

25. DELIVERY OF DOCUMENTS

A. Documents, including reports and other correspondence required by this Order, to be submitted to EPA shall be delivered to the following addressee at the address indicated, and to such other persons as EPA may specify by written notice sent to Spokane:

Neil Thompson
Superfund Branch, HW-113
U.S. Environmental Protection Agency
1200 Sixth Avenue
Seattle, Washington 98101

26. SUBSEQUENT MODIFICATIONS.

This Order may be amended by agreement of EPA and Spokane. . This Order may be amended as to its scope and any of its provisions, tasks or deadlines, including those set forth in the approved RI/FS Work Plan. EPA and Spokane agree that amendment by mutual agreement is the preferred procedure for making any necessary adjustments to this Order and that the dispute resolution procedures of paragraph 29 of this Order are to be avoided if possible so that the overall purposes of this Order may be achieved with a minimum of delay. Amendments shall be in writing and shall become effective, after they have been signed by Spokane, on the date such

1 amendments are signed by the EPA Hazardous Waste Division Director, Region
2 10.

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4 27. FORCE MAJEURE; DEVIATION AND DELAY

5 If any event occurs which is beyond Spokane's reasonable control and
6 which may cause or has caused a delay in or deviation from the achievement
7 of the requirements of this Order, Spokane shall promptly notify EPA's
8 Project Coordinator orally, and shall, within five (5) working days of oral
9 notification to EPA, notify EPA in writing of:

- 10 A. the anticipated duration and cause of the delay or deviation;
11 B. the measures that have been or will be taken to prevent or
12 minimize the delay or deviation; and
13 C. the timetable by which Spokane proposes to carry out such measures.

14 Spokane shall adopt all reasonable measures to avoid or minimize
15 deviation and delay. EPA in turn will adopt all reasonable measures to
16 ensure that its review of and any determinations with respect to a Spokane
17 notice of delay or deviation shall not add to, or increase the delay or
18 deviation.

19 The burden shall be upon Spokane to show that any delay or deviation
20 was, or will be, caused by circumstances beyond its reasonable control.
21 Increased costs to Spokane of performance of the terms of this order shall
22 not be considered circumstances beyond the control of Spokane.

23 If EPA and Spokane can agree that the delay or deviation or anticipated
24 delay or deviation has been or will be caused by circumstances beyond
25 Spokane's reasonable control, this order will be modified accordingly and
26 the time for performance extended for a period equal to the delay resulting

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1 from such circumstances.

2 If EPA and Spokane cannot agree that any delay in or deviation from the
3 achievement of the requirements of this Order, including the failure to
4 submit any report or document, has been or will be caused by circumstances
5 beyond Spokane's reasonable control, the dispute shall be resolved in
6 accordance with paragraph 29 of this Order.

7
8 28. EPA NOTICE OF DISAPPROVAL REGARDING REPORTS AND ACTIVITIES

9 The EPA Project Coordinator will notify Spokane of all objections to,
10 or disapprovals of any reports, activities, or failures to act on the part
11 of the City of Spokane. Such notice shall be given as soon as practicable
12 and put in writing within thirty (30) days of receiving progress,
13 preliminary, final, and deviation or delay reports, activities, or other
14 items described as "deliverables" in the RI/FS Work Plan. It shall
15 include: (a) each activity, deviation, or delay to which EPA has an
16 objection, (b), each portion of any such report EPA regards as deficient,
17 and (c) any directions necessary to implement EPA's requirements. EPA will
18 set forth in writing its reasons for any such objections. Failure of EPA to
19 object to reports, activities, deviations, or delays within thirty (30) days
20 does not constitute a waiver of EPA's right to object at a later time.

21 29. SPOKANE'S RESPONSE TO EPA'S OBJECTIONS AND DISPUTE RESOLUTION

22 A. If the EPA Project Coordinator objects pursuant to paragraph 28
23 above to any activity, failure to act, deviation, or delay by Spokane;
24 Spokane shall, except as provided in this paragraph and paragraph 27 of this
25 Order, implement the directions of the EPA Project Coordinator. Not later
26 than the 21st calendar day after Spokane's receipt of the EPA Project
27 Coordinator's written notice of disapproval specifying EPA's objections to
28 all or part of any report or any action or failure to act on the part of
Spokane, Spokane shall:

1. amend the affected portions to incorporate the EPA directions and deliver the amendment(s) to EPA, or
2. object to EPA in writing pursuant to paragraph 29.B. of this Order.

B. If Spokane objects to any EPA Project Coordinator's notice of disapproval made pursuant to paragraph 28 of this Order, Spokane shall notify EPA in writing of such objections not later than twenty-one (21) calendar days after the date of Spokane's receipt of the notice of disapproval. EPA and Spokane will meet or confer within fourteen (14) days of EPA's receipt of Spokane's objections or explanations and attempt in good faith to resolve all objections by agreement. If EPA and Spokane cannot resolve their dispute, within this fourteen (14) day period, EPA will promptly provide Spokane a written statement of its final position. If Spokane fails or refuses to carry out the directions or to make the amendments specified by EPA in its final position, EPA may elect to carry out the directions or to make the amendments itself and/or to take any other actions it deems necessary including, but not limited to, those specified in paragraphs 34 and 40 of this Order.

30. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to this Order shall be coordinated and consistent with and performed in accordance with the requirements of all applicable local, state, and federal laws and regulations.

31. OTHER CLAIMS

Nothing in this Order shall constitute or be construed as an admission with respect to nor a release from any claim, cause of action or demand in law or equity against any person, firm, partnership, corporation,

1 or state or local governmental entity not a signatory to this Order for any
2 liability it may have arising out of or relating in any way to the
3 generation, storage, treatment, handling, transportation, release, or
4 disposal of any hazardous substances, hazardous wastes, pollutants, or
5 contaminants found at, taken to, or taken from the site. This Order does
6 not preauthorize or constitute any decision on preauthorization of funds
7 under 42 U.S.C. § 9611(a)(2).
8

9 32. PERSONS BOUND

10 This Order shall apply to and be binding upon Spokane, and all of
11 Spokane's agents, subsidiaries, successors, assigns, contractors,
12 subcontractors, and consultants, and upon EPA, its officials and employees.
13 Spokane remains obligated by this Order regardless of any change in
14 ownership of the facility or site, and regardless of efforts made to carry
15 out the terms hereof through agents, contractors, and consultants.
16

17 33. RESERVATION OF RIGHTS

18 A. Notwithstanding compliance with the terms of this Order, including
19 completion of an EPA-approved Remedial Investigation and Feasibility Study,
20 Spokane is not released from any of its liability, if any, for costs of any
21 removal or remedial actions outside the terms of this Order taken by EPA
22 respecting the facility or site.

23 B. EPA reserves the right to take any action pursuant to CERCLA or
24 any other legal authority, including the right to seek injunctive relief,
25 statutory penalties, and punitive damages.

26 C. By entering into and agreeing to this Order, Spokane does not
27 admit to any liability nor to any violation of any law nor to any of the

28 ORDER ON CONSENT - Page 17

1 factual or legal findings, conclusions, or determinations made by EPA
2 herein; however, Spokane will not contest EPA's authority or jurisdiction to
3 issue and enforce this Order, as provided in paragraph 6. Spokane reserves
4 the rights and defenses which it may have regarding liability or
5 responsibility in any subsequent proceedings regarding the Northside
6 landfill facility. EPA and Spokane agree that this order may not be used in
7 any other litigation by a third party for the purpose of establishing fault
8 or liability on the part of Spokane.

9 D. Spokane, its elected officials, and employees agree not to
10 petition EPA for reimbursement from the Fund pursuant to 42 U.S.C. §9606(b)
11 for costs of RI/FS activities which Spokane has agreed to undertake pursuant
12 to this Order. Nothing in this paragraph or this Order precludes Spokane
13 from exercising its rights under 42 U.S.C. §9613(f) to seek contribution
14 from any person who is liable or potentially liable under 42 U.S.C. §9607(a)
15 or to seek indemnification from any person other than the Fund with respect
16 to RI/FS activities which Spokane has agreed to undertake pursuant to this
17 order as provided above.

18 34. OTHER EPA REMEDIES

19 EPA may pursue any remedies or sanctions available to it as relief for
20 failure by Spokane to comply with any requirement of this Order. Such
21 remedies and sanctions may include, but are not limited to, a suit for
22 statutory penalties as authorized by 42 U.S.C. §9606, a federally-funded
23 response action, and/or a suit for exoneration/reimbursement of costs
24 incurred by the United States and any state.

25 35. REIMBURSEMENT OF COSTS

26 Following the end of each federal fiscal year, EPA will submit to
27 Spokane a detailed accounting of all costs incurred by and billed to the
28 ORDER ON CONSENT - Page 18

1 United States after the date of this Order in connection with response,
2 oversight, and community relations costs incurred by the United States
3 government and its contractors and representatives with respect to this
4 Order. Spokane shall pay the amount of those costs by check made payable to
5 the Hazardous Substance Response Trust Fund. A copy of the transmittal
6 letter for payment of EPA's costs shall be sent to each Project
7 Coordinator. Checks shall specifically reference the Northside Landfill
8 site, note that payment is for reimbursement of EPA costs, and be sent to
9 the following address:

10
11 Mellon Bank
12 U.S. Environmental Protection Agency
13 (Regional Hearing Clerk)
14 P.O. Box 371003M
15 Pittsburgh, Pennsylvania 15251
16 Attention: Collection Officer for Superfund

17 with a copy of the transaction sent to:

18 Regional Hearing Clerk
19 Office of Regional Counsel
20 EPA Region 10
21 1200 Sixth Avenue, M/S 50-125.
22 Seattle, Washington 98101

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36. EFFECTIVE DATE

This Order becomes effective, after it has been signed by Spokane,
on the date it is signed by the EPA Hazardous Waste Division Director,
Region 10.

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37. NOTICE TO THE STATE

So that the state may be involved in the initiation, development, and selection of any remedial action as provided under Section 121 of CERCLA, 42 U.S.C. §9621, and so that all Spokane remedial activities may be coordinated with appropriate state agencies, the state of Washington Department of Ecology has been notified of this Order.

38. COMPUTATION OF TIME AND FORM OF NOTICES

A. Any time periods scheduled to begin on the occurrence of an act or event shall begin on the day after the act or event.

B. Any time period scheduled to begin before the occurrence of an act or event shall be computed so that the period ends on the day before the act or event.

C. If the final day of any time period falls on a weekend or legal holiday the time period shall be extended to the next working day.

D. Unless otherwise specified, all notifications shall be sent certified mail, return receipt requested.

39. NEGOTIATION OF REMEDIAL ACTIONS

Upon completion of appropriate components of the Remedial Investigation and Feasibility Study required by this Order, it is the intent of EPA and Spokane, if necessary, to negotiate in good faith toward implementation of remedial actions approved by EPA for the site. If Spokane properly completes the tasks set out in the approved RI/FS Work Plan, EPA shall give Spokane the opportunity to undertake voluntarily under a consent decree, whatever remedial steps may be determined to be necessary as a result of the Remedial Investigation and Feasibility Study produced under this Order, consistent with all laws and EPA policy.

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40. ADDITIONAL RESPONSE TASKS

The parties reaffirm that it is the mutual objectives of EPA and the City of Spokane to carry out the Purpose of the Order set forth in Paragraph six (6) above. In light of the substantial amount of investigation already accomplished at the site and the draft RI/FS already produced it is presumed by both parties that the RI/FS Work Plan attached shall accomplish said purposes. It is however, recognized by both parties that information obtained as a result of the work to be performed may necessitate additional response tasks.

A. In the event that EPA or Spokane determines that additional work, including remedial investigatory work and/or engineering evaluation, is necessary to accomplish the objectives of the RI/FS, notification of such additional work shall be provided to all of the Project Coordinators identified for this site.

B. Any additional work determined to be necessary by Spokane shall be subject to approval by EPA.

C. If EPA and Spokane agree that such additional work should be performed, this order and, if necessary, the schedule contained in the Appendix hereto will be modified pursuant to paragraph 26 to incorporate the additional work.

D. Any additional work determined to be necessary by Spokane and approved by EPA, or determined to be necessary by EPA shall be completed by Spokane in accordance with the standards, specifications, and schedule determined or approved by EPA.

E. If Spokane does not agree that additional work should be performed, Spokane may invoke the "Disputes" procedure in paragraph 29 of this Order. If, following completion of the dispute resolution procedures

1 in paragraph 29 of this order, Spokane fails or refuses to perform any
2 additional work in accordance with the standards, specifications, and
3 schedules specified by EPA, EPA reserves the right to undertake such tasks
4 and/or to pursue any other remedies available to EPA, including but not
5 limited to those remedies referenced in paragraph 34 above, provided,
6 however, that Spokane's failure or refusal to perform such additional work
7 shall not be deemed to be a violation of this Order and shall not be subject
8 to an action for statutory penalties, punitive damages, or stipulated
9 penalties under this Order.

10
11 41. DELAYS IN PERFORMANCE AND STIPULATED PENALTIES

12 A. Except with respect to any extensions agreed to or allowed by EPA
13 pursuant to paragraphs 26, 27, of this Order, Spokane agrees to pay the sums
14 set forth below as stipulated penalties for the violations set forth below:

15 1. For failure to complete, carry out and/or submit any of the
16 "deliverables" set forth in the Appendix to this Order (except the monthly
17 submission of progress reports), Spokane shall pay stipulated penalties
18 accruing in the amount of \$5,000 for the first week or part thereof and
19 \$5,000 per day for each day after the first full week.

20 2. For failure to submit a monthly progress report by the tenth
21 (10th) day of each month as required by paragraph 23 of this Order, Spokane
22 shall pay stipulated penalties accruing in the amount of \$2,000 for the
23 first week or part thereof and \$2,500 per day for each day after the first
24 full week.

1 B. The above stipulated penalties shall accrue commencing upon
2 Spokane's receipt of written notice from EPA that Spokane has failed to
3 timely submit a credible version of one or more of the deliverables
4 specified in the Appendix B to this Order, except that there will be a seven
5 (7) day period in which the City or Spokane may rectify any progress report
6 deficiencies without accruing stipulated penalties.

7 C. Stipulated penalties shall be due and payable within fifteen (15)
8 days of receipt by Spokane of EPA's written notice of violation. Spokane
9 shall forward to Mellon Bank, at the address and in accordance with the
10 procedures specified in paragraph 35 of this Order, a check payable to the
11 Hazardous Substance Response Trust Fund. The check shall note that the
12 payment is for penalties.

13 42. EXONERATION/INDEMNIFICATION OF THE UNITED STATES

14 Insofar as the City of Spokane may be authorized to do so under the
15 laws and Constitution of the State of Washington, Spokane shall save and
16 hold harmless the United States, its agencies, officers, employees, and
17 agents (thereby exonerating the foregoing from), and shall indemnify each of
18 the foregoing against and for, any and all claims arising from or on account
19 of acts or omissions of Spokane, or the officers, employees, receivers,
20 trustees, agents, or assigns of Spokane, relating in any way to carrying out
21 activities pursuant to this Order; but excluding claims arising from or on
22 account of acts or omissions of the United States, its agencies, officers,
23 employees and agents. EPA is not a party to any contract involving the site
24 or facility which is made by Spokane.

1 43. COMMUNITY RELATIONS

2 EPA shall be the lead for community relations, the City shall be
3 responsible for helping to coordinate and implement community relations for
4 the Site. EPA shall consult with the City in the preparation and
5 finalization of fact sheets, press releases, and public notices.

6 The EPA shall accommodate where possible the City's concerns prior to
7 release of such information. The City shall assist in:

- 8 1. Distribution of the fact sheets referred to above;
9 2. Coordination of public meetings related to the investigation
10 program; and
11 3. in supplying appropriate documents and information for the
12 information repository(ies).

13 In the event of the disagreement over the contents of any document
14 prepared for purposes of community relations, EPA shall make the final
15 decision about its content.

16 44. SATISFACTION OF ORDER AND TERMINATION

17 Spokane's duties under this Order shall be satisfied upon issuance by
18 EPA of a writing stating that Spokane have complied with all provisions of
19 this Order, including such additional tasks as EPA may require.

20 IT IS SO AGREED.

21
22 3/15/88
23 Date

Tony C. ...
CITY OF SPOKANE

24
25 3/16/86
26 Date of Issuance

Charles ...
DIRECTOR, EPA HAZARDOUS WASTE
DIVISION, Region 10

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28

APPENDIX A

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY WORK PLAN

WORK PLAN

This work plan is for supplemental data needed to complete the Remedial Investigation (RI) and Feasibility Study (FS) for the Northside Landfill site consistent with the National Contingency Plan (NCP). The Sampling and Analysis Plan, Quality Assurance Project Plan, and Health and Safety Plan, which are required tasks as a part of the work plan, will include detailed discussion of the technical approaches to be used to implement this investigation and complete the reports.

TASK 1 - PLANS AND MANAGEMENT

A. Sampling and Analysis Plan

Update the sampling and analysis plan to address all field activities necessary to obtain additional site data. The plan will be based on previously established sampling plans that are currently in effect at the Northside Landfill. The plan will define the level of effort and specific field activities for each of the media to be sampled. The plan will discuss the following:

- Investigation objectives
- Sampling locations
- Sampling frequency
- Sampling procedures
- Field equipment calibration and maintenance procedures
- Sample custody
- Sample parameters
- Analytical procedures and detection limits
- Data analysis

B. Quality Assurance Project Plan (QAPP)

Update the QAPP plan to assure that the entire RI and the individual components are conducted in a technically correct manner. The plan will encompass the review of existing data, field program development and implementation, sampling techniques, instrument calibration, laboratory analysis, data interpretation, and verification of computer models.

C. Health and Safety Plan

Update the site specific health and safety plan after completion of the sampling plan to address hazards that the investigation team may encounter at the site. In preparation of the plan the city of Spokane will consider the site description and maps, results of previous sampling activities, field reports, and proposed field activities. The health and safety plan will include the following elements:

- Site description
- Hazard evaluation
- Monitoring requirements
- Levels of protection
- Work limitations
- Authorized personnel responsibilities
- Decontamination requirements
- Emergency information

TASK 2 - SUPPLEMENTAL REMEDIAL SITE INVESTIGATION

Conduct those additional investigations necessary to characterize the site and its actual or potential hazard to public health and the environment as set forth below. The site investigation will follow the plans developed in Task 2. Strict chain-of-custody procedures will be followed in the sampling procedures. The site investigation will include the following:

A. Additional Hydrogeologic Investigations

The hydrogeologic investigation shall include (with details to be provided in the Work Plan):

1. Aquifer Unit.

a. Wells

- (1) Location. Three new monitoring wells will be drilled and installed. They will be designated MW-S, MW-U, and MW-Y. MW-S will be located on the southwestern edge of the landfill. MW-U will be installed in the vicinity of MW-P and MW-Q. MW-Y will be installed in the vicinity of MW-M close to the landfill boundary and between MW-M and the Pellow well. The precise locations will be field located with concurrence by EPA.
- (2) Completion Criteria.

Table 1
AQUIFER UNIT WELL COMPLETION CRITERIA

<u>Well No.</u>	<u>Estimated Depth (ft)</u>	<u>Drilling Method</u>	<u>Borehole Diameter at Completion Depth (in.)</u>
MW-S	100	air rotary	6
MW-U	200+	air rotary	6
MW-Y	150+	air rotary	6

Note: Wells U and Y will be completed at the base of the glaciofluvial aquifer. Actual depth will vary from the estimated depth due to field conditions.

(3) Installation Techniques

For those wells drilled with air rotary method, samples of subsurface materials will be retrieved from the air discharge line at approximately 5-foot intervals for inspection and visual classification. In addition, samples will be collected for inspection and visual classification wherever changed geologic conditions are observed.

All wells will be completed with flush threaded 2-inch diameter Schedule 80 PVC screen assemblies and riser pipe in compliance with proposed regulations for resource protection wells:

Wells will be developed by airlift pumping, surging, or bailing until the water is visibly free of sediment and turbidity.

(4) Disposal of cuttings, development water, and drilling water.

MW-S, MW-U, and MW-Y. Cuttings created during the drilling of these wells will be disposed of on site.

Drilling and development water will be screened with an HNU meter. Water reading less than 10 ppm will be allowed to infiltrate on-site in an area in which no waste has been placed. Water reading more than 10 ppm will be transported for treatment to the Spokane sewage treatment plant. Any water that is characterized as a hazardous waste under federal law will be handled properly.

(5) Surveying.

The vertical elevations of the wells will be surveyed to within 0.01 foot, and the surveyed monitoring well reference points will be marked as notches or permanent marks on the casing. The horizontal locations of the monitoring wells will be surveyed to within five feet on an appropriate horizontal grid.

b. Groundwater sampling.

(1) Collection.

Groundwater samples will be collected from the new monitoring wells with dedicated pumps and analyzed to evaluate landfill constituents in the groundwater in the vicinity. Groundwater samples will also be collected from domestic wells described in (2)(b).

(2) Frequency.

(a) A round of samples will be collected about two weeks after well installation from the monitoring wells and those "domestic" wells generally sampled quarterly (i.e. those wells depicted on Fig. ES.3 of the Preliminary Feasibility Study except the Harris well).

(b) The new wells will be sampled according to procedures outlined in the updated sampling and analysis plan.

(c) Samples will be shipped under chain-of-custody control to an appropriate analytical laboratory for analysis.

(3) Parameters.

(a) Field parameters analyzed during the sampling at the time of sample collection will include temperature, pH, and specific conductance.

(b) Laboratory analyses of groundwater samples from the monitoring wells and domestic wells taken in response to this order will include the Washington State Minimum Functional Standards (MFS) parameters listed in the Washington Administrative Code (WAC) 173-304-490(d), plus lead (Pb), copper (Cu), cadmium (Cd), chloroform, 1,1,1-trichloroethane (TCA), trichloroethylene (TCE), tetrachloroethylene (PERC), 1,2-trans-dichloroethylene, 1,1-dichloroethane.

c. Water level measurements.

A minimum of three sets of water level measurements, each taken within a four hour time span; will be collected from all new and existing monitoring wells, as well as the Bryson Irrigation well if possible. The level of the Spokane River will be measured during this period also.

2. Skimmings Unit

a. Monitoring well.

(1) Location.

One additional monitoring well (MW-W) will be installed immediately southwest of the grease skimmings (scum) pits in the undisturbed area of the landfill. The well location will be jointly determined by technical representatives of EPA and the City of Spokane and will be as close to SB-1 as possible except it will not be installed over any waste material in place.

(2) Completion criteria.

The well will be drilled to a depth of approximately 200 feet (to the first confining layer greater than ten feet thick) with a cable tool drill rig. If groundwater is encountered, the well will be completed with flush threaded 2-inch diameter Schedule 80 PVC well screen assembly and riser pipe in compliance with proposed regulations for resource protection wells. It will be developed by airlift pumping, surging, or bailing until the water is visibly free of sediment and turbidity.

(3) Sampling during drilling.

Samples of subsurface materials will be taken every twenty feet as the well is being drilled and at any location at which contamination is visually indicated. The samples will be analyzed in the laboratory for PERC and TCE.

(4) Disposal.

Soil cuttings, development water, and purge water will be left on the ground at the well site, but water will not be allowed to infiltrate into waste in place.

(5) Survey.

The vertical elevation of the well will be surveyed to within 0.01 foot, and the surveyed monitoring well reference point will be marked with a notch or permanent mark on the casing. The horizontal location of the monitoring well will be surveyed to within five feet on an appropriate horizontal grid.

b. Groundwater sampling.

A groundwater sample will be collected from MW-W and analyzed to evaluate the impact of the skimmings unit on the perched zone. The sample will be taken after the well is stabilized. The samples will be analyzed for the parameters listed for the Aquifer unit listed in b.(3) above.

3. Older Refuse Area.

a. Monitoring well.

(1) Purpose.

One additional monitoring well (MW-X) will be installed immediately southwest of the burned refuse area to determine whether this old disposal area is degrading the quality of a groundwater zone that may exist under this part of the landfill.

(2) Location, installation.

The well location will be jointly determined by technical representatives of EPA and the City of Spokane. The well will be drilled to a depth of approximately 200 feet (to the first confining layer greater than ten feet thick) using air rotary drilling techniques.

(3) Completion.

If groundwater is encountered, the well will be completed with flush threaded 2-inch diameter Schedule 80 PVC well screen assembly and riser pipe in compliance with proposed regulations for resource protection wells. It will be developed by airlift pumping, surging, or bailing until the water is visibly free of sediment and turbidity. Soil cuttings, development water, and purge water will be left on the ground at the well site.

(4) Surveying.

The vertical elevation of the well will be surveyed to within 0.01 foot, and the surveyed reference point will be marked with a notch or permanent mark on the casing. The horizontal location of the monitoring well will be surveyed to within five feet of an appropriate horizontal grid.

b. Groundwater sampling.

A groundwater sample will be collected from the new well and analyzed to evaluate the impact of the Old Refuse Area on the groundwater. The samples will be analyzed for the field parameters shown for the Aquifer unit and for the analytical parameters shown for the first sampling event for the Aquifer unit.

c. Soil Sampling.

A soil sample for the interface between the soil and the confining layer will be taken. The sample will be analyzed for PERC and TCE.

4. Landfill Gas Management Plan.

Data from the ongoing landfill gas management plan will be incorporated into the Final Remedial Investigation Report and the Final Feasibility Study Report as they become available. Any remedial actions required to protect human health from landfill gas migration will be evaluated in the Final Feasibility Study.

TASK 3 - REPORTS

A. Final Remedial Investigation Report.

Upon completion of the supplemental characterization efforts for the identified units, a draft Remedial Investigation report will be prepared. This report will incorporate the draft remedial investigation, dated October 1986, and additional information obtained through the supplemental characterization work and the quarterly groundwater monitoring since October 1986. The report will include:

- ° Well logs and completion diagrams for all new monitoring wells, and boring logs and test pit logs for all borings and test pits investigated since the draft remedial investigation was submitted.
- ° Revised hydrogeologic profiles identifying the extent of hydrogeologic units in the vicinity.
- ° Potentiometric surface maps of the Spokane Valley/Rathdrum Prairie Aquifer and any perched aquifer(s).
- ° Isocontours of selected contaminant concentrations in the aquifers.
- ° A description of VOC contamination in the skimmings, older refuse, and sludge units based on groundwater and soil sample analysis.

B. Final Feasibility Study Report.

The preliminary Feasibility Study Report submitted in 1987 will be modified by adding the information generated in the supplemental RI described in this Work Plan and incorporating comments received.

1. Monthly Progress Reports.

Monthly progress reports to EPA describing the technical progress of the project will be prepared. These reports shall: describe the actions that have been taken to implement the order during the previous month, include the results of any sampling and tests and any other data received by Spokane pursuant to the order and describe all work scheduled for the next 30 days.

APPENDIX B

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY SCHEDULE

<u>Project Elements (Deliverables)</u>	<u>Date for Submittal</u> (from Effective Date of Order)
1. Management Plans	
a. Sampling and Analysis Plan	March 31, 88
b. Quality Assurance Project Plan (QAPP)	March 31, 88
c. Health and Safety Plan	March 31, 88
2. Progress Reports on Site Investigation	by 10th days of each month during project period.
3. Meeting to Review FS Report Progress	July 1, 88
4. Draft Remedial Investigation Report	July 15, 88
5. Draft Feasibility Study Report	Aug. 15, 88
6. Final RI	3 wks after receipt of RI comments
7. Final RI/FS for Public Review	3 wks after receipt of FS comments