

BEFORE THE  
OHIO ENVIRONMENTAL PROTECTION AGENCY

OHIO E.P.A.  
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DIRECTOR'S JOURNAL

In the Matter of

SOUTHDOWN, INC.  
506 East Xenia Drive  
Fairborn, Ohio 45324

Respondent

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DIRECTOR'S FINAL  
FINDINGS & ORDER

I. JURISDICTION

This Director's Final Findings and Order (Order) is issued pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency (OEPA) by Ohio Revised Code (ORC) Sections 3734.20, and 6111.03.

II. STATEMENT OF PURPOSE

The objectives of this Order are: (1) to complete a remedial investigation of the Site, described in Article III, paragraph L below, to determine the nature and extent of contamination at the Site caused by the disposal of hazardous, industrial and/or other waste, and (2) to develop a feasibility study and evaluate a program of appropriate remedies, including wetlands restoration, employing sound scientific, engineering and construction practices which shall be consistent with federal, state and local law.

III. DEFINITIONS

The terms used in this Order, and the workplans, and any document required by this Order, shall have the same meaning as used in ORC Chapters 3734. and 6111. and/or as defined below:

- A. "Contractor" means a qualified contractor retained by Respondent pursuant to this Order, and any subcontractor, representative, agent, employee, or designee thereof.

- B. "Days" shall mean calendar days, including weekends and holidays.
- C. "Document" means any record, report, photograph, video tape, correspondence, computer disk or tape, recorded or retrievable information of any kind, including raw data, narrative reports and any and all documentary evidence, relating to treatment, storage, disposal and concerning the investigation and remediation of hazardous waste or industrial waste or pollutants or other waste at the Site.
- D. "Feasibility Study" ("FS") means the development, evaluation, and analysis of remedial alternatives for cleanup action conducted by Respondent in accordance with State environmental laws and this Order.
- E. "Hazardous Waste" shall have the same meaning as defined at ORC 3734.01(J), and shall include "hazardous constituents" as that term is defined in Rule 3745-50-10(A) of the Ohio Administrative Code (OAC).
- F. "NCP" means the National Oil and Hazardous Substances Pollution Contingency Plan, referred to in CERCLA as the National Contingency Plan, and codified at 40 C.F.R. Part 300 (1990) (as subsequently amended).
- G. "OEPA" means the Ohio Environmental Protection Agency and its designated representatives, including any contractor retained by OEPA.
- H. "Party" or "Parties" means Respondent and/or OEPA.
- I. "Remedial Investigation" ("RI") means the investigation conducted in accordance with State environmental laws by Respondent, to determine the nature and extent of the contamination at the Site, and includes the gathering of all necessary data to support the Feasibility Study.
- J. "Remedial Investigation/Feasibility Study" ("RI/FS") means the Remedial Investigation and Feasibility Study together.
- K. "Respondent" means Southdown, Inc., and its successors and assigns

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- L. "Site" means the facility, as the term "facility" is defined in ORC 3734.01(N), which is located approximately one mile east of Fairborn, south of State Route 235, and east of Interstate 675, in Bath Township, Greene County, Ohio, and includes only the area referred to as landfill number six (hereinafter "Landfill #6), which is described in Article IV below, where the treatment, storage, placement or disposal of hazardous wastes, industrial wastes and/or other waste was conducted, including any other area contaminated or threatened to be contaminated by hazardous waste and/or industrial waste and/or other waste migrating therefrom.
- M. "U.S. EPA" means the United States Environmental Protection Agency.
- N. "Workplan" means that document detailing the requirements for characterizing the Site and for support of the Remedial Investigation and Feasibility Study. Each required Workplan shall include a detailed description of the proposed investigations and/or implementation activities; a time schedule for those actions; and personnel and equipment requirements. Each Workplan, which includes sampling as an element, shall also include a sampling plan together with the rationale for sampling activities; locations, quantity and frequency of sampling; sampling and analytical methods; constituents for analysis; and quality control/quality assurance procedures. The required content of the Workplans is outlined in the Generic Statement of Work (SOW) for the RI/FS attached hereto and incorporated herein as Attachment A.

#### IV. FINDINGS OF FACT, DETERMINATIONS, AND CONCLUSIONS OF LAW

OEPA has determined that all findings of fact necessary for the issuance of this Order, pursuant to ORC Sections 3734.20 and 6111.03, have been made and are outlined below. OEPA has determined the following:

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A. The Site is located approximately one mile east of Fairborn, south of State Route 235, and east of Interstate 675, in Bath Township, Greene County, Ohio and includes only the area referred to as Landfill #6, and the contamination emanating therefrom. Landfill #6 is owned by the Respondent, Southdown, Inc., and was previously owned by Southwestern Portland Cement Company ("Southwestern").

B. Between 1930 and 1980, the Respondent conducted disposal operations at Landfill #6. The wastes disposed of at Landfill #6 included: oil, grease, unknown chemical wastes cement kiln dust ("CKD"), construction debris, refuse from company owned housing developments and refractory lining bricks containing chromic oxide. Between 1965 and 1980 approximately 82,050 cubic yards of CKD and refractory lining bricks had been disposed of at Landfill #6. Between 1980 and 1982, the Respondent ceased operations at Landfill #6. Subsequent to the cessation of operations, between the years 1980 and 1982, Landfill #6 was graded and seeded.

C. On October 31, 1990, Ohio EPA collected a water sample from an area of ponded leachate south of Landfill #6. The results of analysis of this sample revealed the presence of the following:

pH	12.09	
Arsenic	388	ug/l
Lead	70	ug/l
Nickel	160	ug/l
Selenium	70	ug/l
Phenolics	159	ug/l

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D. U.S. EPA FIT representatives collected pH measurements on November 1990 from leachate outbreaks around Landfill #6. These measurements revealed pH levels up to 13.7.

E. U.S. EPA Field Investigation Team ("FIT") representatives collected sediment samples on November 6, 1990 on and around Landfill #6. The

analyses of these samples revealed the presence of the following:

acenaphthylene	up to	530	ug/kg
phenanthrene	up to	1,200	ug/kg
anthracene	up to	260	ug/kg
fluoranthrene	up to	4,300	ug/kg
pyrene	up to	3,700	ug/kg
benzo[a]anthracene	up to	2,600	ug/kg
chrysene	up to	3,300	ug/kg
benzo[b]fluoranthene	up to	3,200	ug/kg
benzo[k]fluoranthene	up to	3,700	ug/kg
benzo[a]pyrene	up to	2,600	ug/kg
indeno[1,2,3-cd]pyrene	up to	2,300	ug/kg
dibenzo[a,h]anthracene	up to	570	ug/kg
benzo[g,h,i]perylene	up to	1,900	ug/kg

F. Analyses performed on ground water samples obtained (January & February 1991) by the Respondent from monitoring wells at the Site revealed the presence of the following:

pH	up to	12.0	
Arsenic	up to	927	ug/l
Cadmium	up to	24	ug/l
Chromium	up to	105	ug/l
Lead	up to	108	ug/l
Nickel	up to	283	ug/l
Selenium	up to	22	ug/l
Zinc	up to	463	ug/l
Phenolics	up to	352	ug/l

G. Analyses of samples obtained (December 1990 - March 1991) by the Respondent from surface water and leachate locations at the Site revealed the presence of the following:

pH	up to	12.9	
Arsenic	up to	830	ug/l
Cadmium	up to	20	ug/l
Chromium	up to	100	ug/l
Copper	up to	80	ug/l
Lead	up to	37	ug/l
Nickel	up to	330	ug/l
Selenium	up to	120	ug/l
Zinc	up to	400	ug/l
Phenolics	up to	457	ug/l

H. Arsenic, lead, mercury, nickel, selenium, zinc, phenolics, antimony, cadmium, chromium, copper, as well as the contaminants and pH levels identified in Article IV, paragraphs D, E, F and G, are "industrial waste"

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and/or "other wastes" as defined in ORC Sections 6111.01(C) and (D).

I. The leachate containing the wastes identified in Article IV, paragraphs D and G, of this Order, pertaining to the pH levels identified in those paragraphs, is a hazardous waste, pursuant to OAC Section 3745-51-22, and when released at the Site constitutes a disposal of hazardous waste, as the term "disposal" is defined in ORC Section 3734.01(F).

J. The Site is a "facility," as that term is defined in ORC Section 3734.01(N).

K. The discharge, deposit, injection, dumping, leaking, spilling, or placing or emitting of industrial waste, hazardous waste, or other wastes into or on surface and ground waters constitutes pollution of the "waters of the State", defined at ORC Section 6111.01(H).

L. The placement or disposal of industrial waste, hazardous waste, or other wastes at and from the Site constitutes a substantial threat to public health or safety or is causing or contributing to or threatening to cause or contribute to water pollution or soil contamination.

M. The actions to be taken pursuant to this Order are reasonable and necessary to protect the public health, welfare and/or the environment, and the Director believes the issuance of this Order is furthering the intent of the General Assembly and that of the Environmental Protection Agency, that the actions taken pursuant to this Order will prevent and abate pollution of the environment for the health, safety, welfare, and property of the people of the state of Ohio.

N. The Director has given consideration to, and based his determination on evidence relating to the technical feasibility and economic reasonableness of complying with these Orders, and on evidence relating to conditions calculated to result from compliance with these Orders. Further, the

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Director has determined that compliance with these Orders shall benefit the people of the State of Ohio and accomplish the purposes set out in ORC Chapter 6111.

#### V. WORK TO BE PERFORMED

- A. All work to be performed by the Respondent pursuant to this Order shall be under the direction and supervision of a qualified environmental engineer or geologist with expertise in hazardous waste site investigation.
- B. Attachment A to this Order contains the Generic Statement of Work (SOW) for implementation of an interim action and complete RI/FS which is incorporated into and made a part of this Order.
- C. Within sixty (60) days of the effective date of this Order, Respondent shall submit a draft workplan for the implementation of the complete RI/FS at the Site. In addition, the Respondent shall submit a draft interim action workplan, pursuant to task 3 of the SOW, to address the discharges of leachate at the Site within forty-five (45) days of the effective date of this Order. The RI/FS workplan shall be developed in conformance with this Order, the Generic SOW, state law including ORC Chapters 3734 and 6111 and the regulations promulgated thereunder and the most current version of the following guidance documents:

1. How Clean is Clean, Final, Ohio EPA, Division of Emergency and Remedial Response, Policy No. DERR-00-RR-009, July 26, 1991
2. Background Guidance, Final, Ohio EPA, Division of Emergency and Remedial Response, July 26, 1991
3. Guidance for Conducting Remedial Investigation and Feasibility Studies under CERCLA, Interim Final, OSWER 9355.3-01, EPA/540/G-89/004, October, 1988
4. Risk Assessment Guidance for Superfund: Volume 1 - Human Health

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- Evaluation Manual (Part A), Interim Final, EPA/540/1-89/002, December, 1989
5. Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part B), "Development of Risk-based Preliminary Remediation Goals," OSWER Directive 9285.7-01(B), December 1991, Interim
  6. Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part C), "Risk Evaluation of Remedial Alternatives," OSWER Directive 9285.7-01C, December 1991, Interim
  7. Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Exposure Factors," OSWER Directive 9285.6-03, March 1991, Interim Final
  8. Risk Assessment Guidance for Superfund: Volume II - Environmental Evaluation Manual, OSWER Directive 9285.7-01. EPA/540/1-89/001A, March 1989, Interim Final
  9. Superfund Exposure Assessment Manual, OSWER 9285.5-1, EPA/540/1-88/001, April, 1988
  10. Exposure Factors Handbook, EPA/600/8-89/043, March, 1990
  11. RCRA Ground Water Monitoring Technical Enforcement Guidance Document (TEGD), OSWER Directive 9950.1, September, 1986
  12. Guidance for Remedial Actions for Contaminated Ground Water at Superfund Sites, OSWER 9283.1-2, EPA/540/G-88/003, December 1988, Interim Final
  13. Data Quality Objectives for Remedial Response Activities, Volume I -Example Scenario, OSWER Directive 9355.0-7B, EPA/540/G-87/004, March 1987

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14. Superfund Remedial Design and Remedial Action Guidance, OSWER 9355.0-4A, June 1986
15. Ecological Assessments of Hazardous Wastes Sites: A Field and Laboratory Reference, EPA/600/3-89/013, March, 1989
16. Guidelines and Specifications for Preparing Quality Assurance Project Plans, Ohio EPA, Division of Emergency and Remedial Response, Policy No. DERR-00-RR-008, March 1990
17. CERCLA Compliance with Other Laws Manual - Part I, OSWER Directive 9234.1-01, EPA/540/G-89/006, August 1988, Interim Final
18. CERCLA Compliance with Other Laws Manual - Part II, OSWER Directive 9234.1-02, EPA/540/G-89/009, August, 1989, Interim Final
19. U.S. EPA Integrated Risk Information System (IRIS) Data Base
20. Guidance for Data Usability in Risk Assessment, OSWER Directive 9285.7-05, EPA/540/G-90/008, October 1990; Interim Final
21. U.S. EPA Health Effects Assessment Summary Tables, Office of Emergency & Remedial Response, published annually.

If OEPA determines that any additional guidance documents affect the work to be performed under this Order, OEPA will notify the Respondent and any affected Workplans or reports shall be amended accordingly.

D. Upon approval of the RI/FS Workplan, Respondent shall implement the work detailed in the RI/FS Workplan in accordance with the schedule contained in the RI/FS Workplan.

E. Upon approval of the interim action workplan, the Respondent shall implement the work detailed in that workplan in accordance with the schedules contained therein.

#### VI. REPORTING

A. Respondent shall submit written progress reports which describe

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the activities which have been taken toward achieving compliance during the previous month, as well as activities which are scheduled for the next month, to OEPA by the tenth day of every month following the effective date of this Order, unless otherwise designated pursuant to this Order.

At a minimum, these reports shall:

1. Identify the Site and activity;
  2. Describe status of work at the Site and progress to date;
  3. Demonstrate the percentage of work completed in accordance with the approved schedule;
  4. Describe difficulties encountered during the reporting period;
  5. Describe actions being taken to rectify problems;
  6. Describe activities planned for the next month;
  7. Identify changes in key personnel.
  8. List target and actual completion dates for each element of activity, including the project completion; and
  9. Provide an explanation of any deviation from the milestones in the Workplan schedules.
  10. Provide raw data (examples include, but are not limited to, field notes, boring logs, laboratory analytical results) generated during the reporting period.
- B. Such progress reports and any other documents, reports, approvals, or correspondence submitted pursuant to this Order shall be sent by certified mail return receipt requested (or the equivalent) to the OEPA at the following addresses (or to such other address as the OEPA may hereafter

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designate in writing):

Ohio EPA  
1800 Watermark Drive  
P. O. Box 1049  
Columbus, Ohio 43266-0149  
ATTN: Manager, Technical and Program Support Section,  
Division of Emergency and Remedial Response

and;

Ohio EPA  
Southwest District Office  
40 South Main Street  
Dayton, Ohio 45402  
ATTN: Tom Schneider, DERR

All correspondence to the Respondent will be directed to the following:

Southdown, Inc.  
506 East Xenia Drive  
Fairborn, Ohio 45324  
Attn: Division Environmental Manager

#### VII. SAMPLING AND DATA/DOCUMENT AVAILABILITY

- A. The Respondent shall submit a hard copy of all raw data and all original reports of analytical procedures and results to OEPA, as specified in Article VI, Paragraph A, above. This requirement may be suspended or modified at the direction of OEPA.
- B. Respondent may submit to OEPA any interpretive reports and written explanations concerning raw data and original laboratory reports. Such interpretive reports or explanations may not be submitted in lieu of original laboratory reports and raw data. Should Respondent subsequently discover any error in any report or raw data, Respondent shall promptly notify OEPA of such discovery and provide the correct information.
- C. Respondent shall notify the OEPA Site Coordinator not less than thirty (30) days (unless otherwise agreed between the Site Coordinators) in advance of any sample collection for which the OEPA Site Coordinator has indicated that (s)he may wish to obtain split or duplicate samples.
- D. Respondent shall preserve, during the pendency of this Order, and for a

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minimum of ten (10) years after its termination, copies of all records and documents within its possession or that of its divisions, employees, agents, accountants, or contractors which relate to work performed under this Order, despite any document retention policy to the contrary. After the ten (10) year period, Respondent shall notify OEPA within thirty (30) days prior to the destruction of any such documents required to be kept pursuant to this Order. Respondent shall make available to OEPA such records or copies of any such records, except for such documents or records as are protected by legal privileges or immunities.

#### VIII. CONFIDENTIAL INFORMATION

Respondent may assert a claim of business confidentiality covering the information requested by this Order, except for analytical data, pursuant to ORC 6111.05(A) and Ohio Administrative Code (OAC) Rule 3745-50-30(A). Information determined to be confidential will be afforded protection under ORC 6111.05(A) and OAC Rule 3745-50-30. If no such claim accompanies the information when it is submitted to OEPA, it may be made available to the public by the OEPA without further notice to Respondent.

#### IX. RESERVATION OF RIGHTS

A. Nothing contained herein shall be construed to prevent OEPA from (1) seeking legal or equitable relief to enforce the terms of this Order including claims for natural resources damages; or (2) completing any work described in this Order. OEPA reserves the right to take any enforcement action, recover costs, or seek damages for injury to natural resources pursuant to any available legal authority for past, present, or future violations of ORC Chapters 3734, and 6111, arising from conditions at the Site.

B. OEPA specifically reserves the right to perform or require the

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Respondent to perform additional investigation, removal, or remediation at the Site (including ground water investigation) pursuant to ORC Chapters 3734, or 6111. or other applicable authority for these or any other conditions at the site.

#### X. OTHER CLAIMS

Nothing herein is intended to release, discharge, or in any way affect any claims, causes of action or demands in law or equity against any person, firm, partnership or corporation not named to this Order from any liability he, she, or it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release or disposal of any hazardous wastes, industrial wastes, other wastes, or pollutants at, to or from the Site.

#### XI. OTHER APPLICABLE LAWS

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

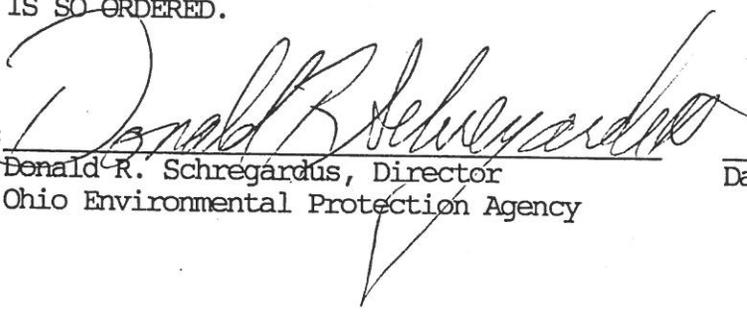
#### XII. TERMINATION AND SATISFACTION

A. The provisions of this Order shall be terminated when the Respondent demonstrates in writing and certifies to OEPA's satisfaction that all activities required under this Order have been completed and OEPA approves such certification in writing. Such certification by OEPA shall not terminate the obligation of the Respondent to comply with Sections VII, and IX (record preservation and reservation of rights).

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IT IS SO ORDERED.

By:

  
Donald R. Schregardus, Director  
Ohio Environmental Protection Agency

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