*On this day, October 26, 2004,*
the U.S. Environmental Protection Agency (U.S. EPA)

*Determines that*

# *LEDC Parcels of Land at the South Point Plant Superfund Site Are Ready for Industrial Reuse*

*U.S. EPA Region 5*
*Superfund Director*

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This Ready for Reuse (RfR) determination is for the parcels of land at the South Point Plant Superfund site ("Site") owned by the Lawrence Economic Development Corporation (LEDC). This RfR determination provides that U.S. EPA has made a technical determination that LEDC-owned parcels of land at the Site, located in the Village of South Point, Lawrence County, Ohio, are ready for industrial reuse and the Site's remedy will remain protective of human health and the environment, subject to operation and maintenance of the remedy and the limitations as specified in the Record of Decision (ROD), other response decision documents, and the land title documents, which have been summarized in the attached report, Ready for Reuse Determination, South Point Plant Superfund Site, October 26, 2004. This RfR determination remains valid only as long as the requirements and use limitations specified in the ROD, other response decision documents, and the land title documents are met.

Limitations on Site uses identified in the ROD include the following: groundwater may not be used for purposes other than monitoring and remediation and Site activities shall not interfere with the Site's remedy and long-term groundwater monitoring program. No use or public access is allowed on the fenced and capped southern portion of the Site's Eastern Disposal Area. The fly ash deposits in the Site's Northern Fly Ash ponds must remain stabilized. U.S. EPA and Ohio EPA shall be provided access to the Site for operation, maintenance, and inspection activities. The components of the remedy requiring ongoing operation and maintenance are: quarterly inspection of the Eastern Disposal Area's cap and fencing, erosional controls at remediated areas, surface stabilization controls at the Northern Fly Ash Ponds, and long-term groundwater monitoring. Honeywell, Inc. is responsible for the continuing operation and maintenance of the remedy at the Site.

This RfR determination is a technical decision document and does not have any legally binding effect and does not expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits of any party. U.S. EPA assumes no responsibility for reuse activities and/or for any possible or potential harm that might result from reuse activities. U.S. EPA retains any and all rights and authorities it has, including but not limited to legal, equitable, or administrative rights. U.S. EPA specifically retains any and all rights and authorities it has to conduct, direct, oversee, and/or require environmental response actions in connection with the Site, including but not limited to instances when new or additional information has been discovered regarding the contamination or conditions at the Site that indicate that the remedy and/or the conditions at the Site are no longer protective of human health or the environment for the types of uses identified in the RfR determination. Honeywell, Inc. is responsible for ensuring that any limitations specified in the ROD that might be affected by a particular industrial use are complied with during the activity.

The types of uses identified as protective in this RfR determination remain subject to (i) applicable federal, state, and local regulation, and to (ii) title documents, including but not limited to easements, restrictions, and institutional controls.

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## I. Executive Summary

This Ready for Reuse (RfR) determination is for the parcels of land at the 610-acre South Point Plant Superfund site ("Site") owned by Lawrence Economic Development Corporation (LEDC).[1] The areas of the Site addressed by U.S. EPA include the 40-acre Northern Fly Ash Ponds, the 13-acre Eastern Disposal Area, the two-acre Disposal Area D, the 25-acre Mid-Plant Area, and the less-than-one-acre Coke Oven Gas Blowdown Area.

The conditions summarized in this RfR determination are based on limitations and requirements established in U.S. EPA decision documents for the Site, including the Record of Decision (ROD). U.S. EPA has made a technical determination that these parcels of land at the Site, located in the Village of South Point, Lawrence County, Ohio, are ready for industrial use and that the Site's remedy will remain protective of human health and the environment, subject to operation and maintenance of the remedy and the limitations identified below, as specified in the ROD.

1. LEDC-owned parcels of land at the Site are ready for industrial use consistent with scenarios in the Site's baseline risk assessment (BLRA). The BLRA assumed that the Site could be used as an industrial complex or could be used for alternative industrial uses in the future that involved construction activities. LEDC-owned parcels of land at the Site are safe for industrial use so long as:
    a. there is no use or public access allowed on the fenced and capped southern portion of the Site's Eastern Disposal Area, where on-site wastes were consolidated;
    b. the fly ash deposits in the Site's Northern Fly Ash Ponds remain stabilized;
    c. U.S. EPA and its contractors are allowed access to all on-site monitoring wells at all times; and
    d. potable groundwater use on the Site is prohibited.

2. The components of the remedy requiring ongoing operation and maintenance are: the fenced and capped portion of the Eastern Disposal Area, erosional controls at remediated areas of Disposal Area D, the Mid-Plant Area, and the Coke-Oven Gas Blowdown Area, the Northern Fly Ash Ponds, and the Site's groundwater monitoring and pumping system. Honeywell, Inc., one of the site's potentially responsible parties (PRPs), is responsible for the operation and maintenance of the remedy at the Site.

U.S. EPA has assessed the risk to human health and the environment resulting from contamination at the Site. During U.S. EPA's investigation of the Site in February 1993, a baseline risk assessment of the human and environmental risks associated with industrial and residential uses at the Site was conducted. Unacceptable risks identified for the Site included human exposure to chloride, nitrate, and sulfate, with lesser amounts of the heavy metals iron and manganese,

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[1] The RfR determination excludes the fenced and capped portion of Eastern Disposal Area owned by LEDC.

through groundwater, and heavy metals, including arsenic, and lesser amounts of chloride, nitrate, ammonium, and sulfate, through surface soil. In its Record of Decision (ROD), U.S. EPA selected response actions to manage and eliminate these risks. With the completion of the response actions required by the ROD, Honeywell, Inc. has attained the CERCLA cleanup goals and remedial action objectives for the Site.

As a result, based on information available as of this date, U.S. EPA has determined that the unacceptable levels of risk to current and future users of LEDC-owned parcels of land at the Site have been abated for industrial users. LEDC-owned parcels of land at the Site are ready for industrial use and the Site's remedy will remain protective of human health and the environment, subject to operation and maintenance of the remedy and limitations as specified in the ROD.

U.S. EPA Region 5 issued this Ready for Reuse Determination, effective October 26, 2004.

By: _____

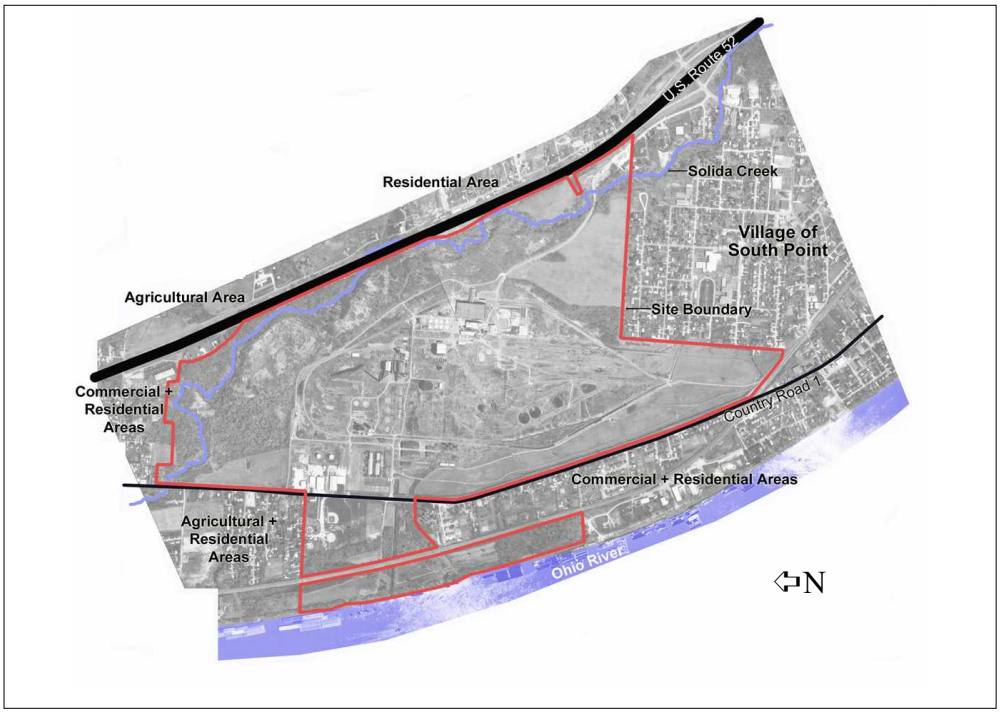
Richard C. Karl, Acting Director
Superfund Division
United States Environmental Protection Agency
Region 5

Documents pertaining to the Site and the RfR determination are part of the Administrative Record for the Site, which is available for review at Briggs Lawrence Library in South Point, OH and at U.S. EPA Region 5 offices in Chicago, IL. Additional information can be obtained from Nabil Fayoumi, the Site's Remedial Project Manager (RPM), who can be reached at 312.886.6840 or fayoumi.nabil@epa.gov.

## II. Site and Parcel Location

The South Point Plant Superfund site is located in the Village of South Point, Lawrence County, Ohio, at 38° 26' N latitude and 82° 35' 30" W longitude. The Site is located between U.S. Route 52 to the east and the Ohio River to the west. The Site's western boundary includes 5,000 feet of Ohio River frontage. Solida Creek, a small intermittent stream, runs along the Site's eastern and northern boundaries, paralleling U.S. Route 52. Exhibit 1 shows a labeled aerial photograph of the Site and surrounding areas.

**Exhibit 1.** South Point Plant Aerial Photograph Showing Surrounding Land Uses




From the Site's southernmost edge, the Site boundary extends west for 400 feet, meeting County Road 1. The boundary turns to the north and parallels County Road 1 for 4,800 feet before turning west, extending for 600 feet to the N&W Railroad. On the river side of the railroad, the boundary turns to the southeast, extending parallel to the Ohio River for 1,200 feet, before extending southwest for 500 feet to the Site's southwest corner. The Site's western boundary extends to the north, along the Ohio River, for 3,400 feet. The Site's western boundary then extends east for 1,800 feet, crossing the N&W Railroad, and turns north after crossing County Road 1. The final portion of the Site's western boundary extends 1,500 feet along County Road 1, ending at the Site's northwest corner. The Site's northern boundary extends east from the Site's northwest corner for 2,000 feet, and the Site's eastern boundary then extends along U.S. Route 52 for 6,000 feet. At the end of the Site's eastern boundary, the Site's southern boundary turns west and extends for 2,400 feet. The southern boundary then turns south for 1,400 feet, returning to the Site boundary's southernmost edge.

The Site is surrounded to the north and south by residential properties, commercial properties, agricultural areas, and a little league field. U.S. Route 52 runs along the Site's eastern boundary, while Country Road 1 separates the Site's western river frontage from the remainder of the Site. The Site is not zoned – the Village of South Point's commercial, industrial, and residential districts do not extend beyond the downtown area, located adjacent to the Site's southern boundary. A deed restriction and restrictive covenants placed on the Site restrict the Site's uses to commercial and industrial uses (see Appendix D). Exhibit 2 shows the tax parcels – outlined in red – that are included, in whole or in part, in the LEDC-owned parcels of land at the South Point Plant Superfund site. LEDC-owned parcels of land at the Site are the only parcels of land included in the RfR determination. Parcels of land at the Site not owned by LEDC, as well as the fenced and capped portion of the Eastern Disposal Area, are not included.[2]

**Exhibit 2.** South Point Plant Aerial Photograph with LEDC Tax Parcel Overlay

| Map Key | | | |
|---|---|---|---|
| **Parcel Code** | **Parcel Number** | **Parcel Code** | **Parcel Number** |
| A | 13-123-0200.001 | F | 39-001-0100 |
| B | 15-139-0600.001 | G | 39-001-0200 |
| C | 16-070-0100 | H | 39-001-0300 |
| D | 16-0700100.001 | I | 39-001-0400 |
| E | 16-070-0102 | | |

[2] In Exhibit 2, parcels of land at the Site that are not owned by LEDC are outlined in black.

## III. Site Summary

*Site and Contaminant History*

The South Point Plant Superfund site is a 610-acre site located in Perry Township in the Village of South Point, Ohio. The Site was listed on the National Priorities List (NPL) in September 1984. Soil and groundwater contamination from on-site munitions, fertilizer, coal, and ethanol industries affected several areas within the Site's boundaries; the majority of the Site's acreage was never contaminated.

Operations at the Site began in 1943, when Buckeye Munitions built the South Point Plant for the production of ammonium nitrate explosives for the federal government. Allied Chemical, Inc. purchased the Site in 1946 and produced ammonia, urea, nitrogen fertilizer solution, melamine, formaldehyde, and urea formaldehyde mixtures until 1978. Ashland Oil, Inc. purchased the facility in 1979. Ashland Oil demolished and removed many of the existing plant's structures and constructed a coal-water fuel pilot plant and a pitch prilling test plant. Both the pilot plant and the test plant have been dismantled. In 1981, South Point Ethanol acquired an 80-acre tract in the middle of the former production area for ethanol production. In 1985, Cardox, a division of the Air Liquide Corporation, began leasing a portion of the South Point Ethanol tract for liquid carbon dioxide production. South Point Ethanol ceased operation in August 1995. Air Liquide discontinued operation in January 1997. U.S. EPA identified Allied-Chemical, Inc. (now Honeywell, Inc.), Ashland Oil, Inc. (now Ashland, Inc.), Ashland Ethanol, Inc., and South Point Ethanol as the Site's potentially responsible parties (PRPs). Honeywell, Inc. is responsible for the continuing operation and maintenance of the remedy at the Site.

From 1943 to the mid-1980s, site refuse, coal cinder, laboratory chemicals, asbestos insulation materials, waste lubrication oils, and by-product and off-specification solids (such as ammonium nitrate, urea, and melamine) were deposited on-site. Industrial manufacturing activities were centered at two areas, the Mid-Plant Area and the Coke Oven Gas Blowdown Area, on the Site. Sampling at the Site indicated that there were five localized areas of soil contamination where waste materials were stored or industrial manufacturing activities took place. U.S. EPA sampling at the Site in 1993 also indicated that the groundwater underneath the Site was contaminated. Contaminants of concern found in the Site's soils and groundwater included volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), waste specific compounds (ammonia, nitrate/nitrite, and sulfate), and metals (arsenic, barium, beryllium, cadmium, copper, and selenium).

*Summary of Cleanup Activities*

Exhibit 3 shows a time line of U.S. EPA Activities performed to date at the South Point Plant Superfund site.

**Exhibit 3.** Time Line of U.S. EPA Activities Performed to Date at the South Point Plant Superfund Site

| | |
|---|---|
| 06/1981 | Site brought to attention of U.S. EPA |
| 04/1983 | Site Inspection |
| 04/1983 | Preliminary Assessment |
| 09/1983 | Site proposed for listing on U.S. EPA's National Priorities List (NPL) |
| 09/1984 | Site listed on NPL |
| 04/1987 | Administrative Order on Consent |
| 02/1993 | Baseline Risk Assessment |
| 08/1994 | Remedial Investigation |
| 06/1997 | Feasibility Study |
| 09/1997 | Record of Decision |
| 03/2001 | Remedial Design Report |
| 12/2001 | Remedial Actions at the Site |
| 12/2001 | Preliminary Closeout Report for the Site |
| 10/2002 | Construction Completion Report |
| 05/2003 | Revised Construction Completion Report |

Appendix B provides a glossary of terms.

U.S. EPA selected a remedy in the Site's 1997 ROD. All of the potential remedies considered for the Site assumed that the likely future reuse of the Site would be for industrial purposes.

The Site's selected remedy included institutional controls, soil excavation and disposal, on-site containment and consolidation, and the continued pumping, testing, and discharge of the Site's groundwater into the Ohio River to address the soil and groundwater contamination. Contaminated soils were placed under a dual barrier cap on a portion of the Eastern Disposal Area, a 13-acre area on the Site's eastern edge. The Site's groundwater is being pumped, tested, and discharged into the Ohio River under a site-wide NPDES permit. U.S. EPA's remedial goals for groundwater are long-term (approximately ten years) and have not yet been achieved.

The remedial design for the South Point Plant Superfund site included a modification to the remedy selected in the Site's ROD. The remedy originally required the placement of single-barrier caps on portions of both Disposal Area D and the Eastern Disposal Area. In 1998, Allied-Chemical (now Honeywell, Inc.) requested that contaminated soils and waste from Disposal Area D be consolidated under a dual-barrier cap located in the southern portion of the Eastern Disposal Area.[3] Disposal Area D would then be backfilled with clean soil. U.S. EPA approved the remedy modification request and designated the modification as a minor alteration to the ROD.

Once U.S. EPA approved the work plan for the Site's remedial design in March 2001, remedial actions to address soil and groundwater contamination at the South Point Plant Superfund site were initiated in May 2001. The Site's remediation took eight months and was completed in December 2001. A Preliminary Closeout Report was issued by U.S. EPA in December 2001 and a revised Construction Completion Report was completed in May 2003. The Site's Final Closeout Report will be issued by U.S. EPA after the Site's groundwater remedial goals have been met.

*Redevelopment/Reuse History*

The current owners of the Site include Lawrence Economic Development Corporation, which is developing an industrial park called The Point on its property. The parcels of land at the Site owned by LEDC are the subject of this RfR determination (see Exhibit 2). The parcels of land at the Site owned by Biomass, Inc., which owns 14 noncontiguous parcels of land at the Site and operates on-site disposal facilities, are not included in the RfR determination.[4]

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[3] Single-barrier caps would have consisted of a two-foot thick layer of clay. Adequate sources of clay could not be identified at the Site, so a dual-barrier cap consisting of a flexible membrane liner and a geosynthetic clay liner was selected for the southern portion of the Eastern Disposal Area.

[4] The parcels of land at the Site owned by Biomass, Inc. include areas where waste materials were stored or industrial manufacturing activities took place. The Site's selected remedy – institutional controls, soil excavation and disposal, on-site containment and consolidation, and the continued pumping, testing, and discharge of the Site's groundwater into the Ohio River – directly addressed the soil and groundwater contamination in these portions of the Site. These areas are not included in the RfR determination because the areas are not yet in compliance with the Site's institutional controls, which stipulate the revegetation of these areas to address soil erosion.

## IV. U.S. EPA's Basis for the Ready for Reuse (RfR) Determination

*Background*

The South Point Plant Superfund site RfR determination is based on U.S. EPA documents produced during the course of remedial activities at the Site. These documents provide evidence that the Site is ready for industrial use and that the Site's remedy will remain protective of human health and the environment, subject to operation and maintenance of the remedy and limitations as specified in the ROD. The RfR determination is based primarily on the Site's baseline risk assessment, completed in February 1993 as a component of the Site's remedial investigation. Additional documents providing information about the Site's remedy, operation and maintenance requirements, and limitations include: the ROD, Preliminary Closeout Report, and Construction Completion Report. These reports can be found in the Site's Administrative Record, which is available for review at the Briggs Lawrence Library in South Point, OH and at U.S. EPA Region 5 offices in Chicago, IL.

The Site's baseline risk assessment (BLRA) analyzed the cumulative risks associated with using the South Point Plant Superfund site for industrial purposes and determined that the Site did not pose an unacceptable risk to industrial users, but did pose an unacceptable risk to trespassers and on-site residents. Prior to remediation, the Site's 1997 ROD, which describes the remedy selected for the Site, concluded that "it is reasonably anticipated that future use at the Site will remain industrial."

U.S. EPA's construction and post-construction completion reports confirm the successful remediation of the South Point Plant Superfund site. The Site's Preliminary Closeout Report states that the Site's remedy has reached "construction completion," meaning that all remedy components have been built and are operational. The Site's Construction Completion Report describes the construction of the remedy and operation and maintenance requirements. U.S. EPA asserts that the Site's remedy is functioning according to expectations.

*Description of Risks*

A baseline risk assessment (BLRA) was prepared for the South Point Plant Superfund site in 1993 as part of the remedial investigation. The term "baseline" refers to the risk assessment's assumption that remedial work had not been performed at the Site and that access to the Site was not limited in any way. Individual exposure, dose, and risk calculations were developed for three populations: trespassers, industrial workers, and residents.

These calculations were then used to develop cumulative risks for the active and inactive areas of the Site. The active area, which includes source areas of the Site where industrial activities were concentrated, comprises the Mid-Plant Area and the Coke Oven Gas Blowdown Area. The inactive area, which includes areas of the Site where waste was disposed of, comprises Disposal Area D, the Northern Fly Ash Ponds, and the Eastern Disposal Area.

The BLRA indicated unacceptable levels of cumulative risk (based on either cancer risk or an index of other health effects from long-term exposure) for on-site residents and trespassers. Cumulative risk levels for industrial workers did not exceed the risk ranges. Unacceptable risks identified for on-site residents and trespassers at the Site included human exposure to chloride, nitrate, and sulfate, with lesser amounts of the heavy metals iron and manganese, through groundwater, and heavy metals, including arsenic, and lesser amounts of chloride, nitrate, ammonium, and sulfate, through surface soil.

The BLRA also indicated that chemical concentrations at the Site are such that potential risks to plants, aquatic life, and terrestrial wildlife are expected to be minimal. Observations of the character and composition of the terrestrial and aquatic communities suggest that the Site is not posing a risk to surrounding ecosystems.

Appendix A provides additional information on the Site's 1993 BLRA.

## V. Ongoing Limitations and Responsibilities Previously Established by U.S. EPA

*Institutional and Engineering Controls*

The revised Construction Completion Report, issued in May 2003, describes the current remedial components for the South Point Plant Superfund site. The ROD and Construction Completion Report require that, in order for the remedy implemented for the South Point Plant site to remain protective of human health and the environment, the following institutional controls must be followed:

1. there must be no use or public access allowed on the fenced and capped southern portion of the Site's Eastern Disposal Area, where on-site wastes were consolidated;

2. the fly ash deposits in the Site's Northern Fly Ash Ponds must remain stabilized;

3. U.S. EPA and its contractors must be allowed access to all on-site monitoring wells at all times; and

4. potable groundwater use on the Site is prohibited.

Potentially responsible parties Ashland, Inc., Ashland Ethanol, Inc., and South Point Ethanol placed a deed restriction and restrictive covenants on the South Point Plant Superfund site as part of a 1998 Consent Decree with U.S. EPA. The deed restriction and restrictive covenants restrict uses at the Site to commercial/industrial uses and require that any activities on the property must not disturb the Site remedy. Honeywell, Inc. is responsible for monitoring the Site's deed restrictions and restrictive covenants.

The deed restriction reads as follows, in part:

> "No building, structure, or other object shall be built or placed on the Site that would disturb the cap over the landfills or would otherwise disturb any component of the remedy at the Site. Further, no one shall use surface or groundwater from the Site for any purpose, including but not limited to human or animal consumption."

The seven restrictive covenants specify that the Site's future uses shall be limited to commercial/industrial purposes only and reiterate the specifications described in the deed restriction in greater detail.

The Consent Decree states that the restrictive covenants will operate and be enforced as follows:

> "Said covenants shall run with the land, shall be binding upon any and all successors in interest, and all assignees, lessees, sublessees, operators, tenants, licensees and agencies, and any and all persons who acquire any interest in the property, and shall be for the benefit of Ashland, Inc., Ashland Ethanol, Inc., and South Point Ethanol, An Ohio General Partnership, the United States Environmental Protection Agency ("EPA"), and shall be privileged to enforce these covenants by appropriate action in a court of competent jurisdiction."

The full text of the Site's deed restriction and restrictive covenants is provided in Appendix D.

*Operation and Maintenance Requirements*

Operation and maintenance activities are designed to ensure that the remedy is operating and continues to operate properly. The components of the remedy requiring ongoing operation and maintenance activities are: the Eastern Disposal Area's cap and fencing, erosional controls at remediated areas of Disposal Area D, the Mid-Plant Area, and the Coke-Oven Gas Blowdown Area, surface stabilization controls at the Northern Fly Ash Ponds, and the Site's groundwater monitoring and pumping system.

Quarterly visual inspections monitor the Eastern Disposal Area's cap and fencing, erosional controls at remediated areas, and surface stabilization controls at the Northern Fly Ash Ponds. Operation and maintenance activities for the Site's groundwater monitoring and pumping system include the inspection and maintenance of groundwater extraction wells, and monitoring of groundwater flow and quality. Groundwater monitoring consists of measuring levels of ammonia, arsenic, beryllium, cadmium, copper, manganese, nickel, and nitrate. Annual reports assess the Site's hydraulic gradients, contaminant concentration trends, volumes of pumped water, and extracted contaminant mass. The groundwater monitoring and pumping system will remain operational until it can be demonstrated that the groundwater plumes have been remediated.

Honeywell, Inc. is responsible for continuing operation and maintenance of the remedy at the Site, with oversight provided by U.S. EPA and Ohio EPA. Specific information relating to ongoing operation and maintenance activities can be found in the Site's ROD, remedial design report, and operation and maintenance progress reports.

Reviews will be performed at the Site every five years to ensure that the remedy remains protective of human health and the environment. The first report is due in March 2007.

## VI. Provisos

This RfR determination is a technical decision document and does not have any legally binding effect and does not expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits of any party. U.S. EPA assumes no responsibility for reuse activities and/or for any potential harm that might result from reuse activities. U.S. EPA retains any and all rights and authorities it has, including, but not limited to legal, equitable, or administrative rights. U.S. EPA specifically retains any and all rights and authorities it has to conduct, direct, oversee, and/or require environmental response actions in connection with the Site, including but not limited to instances when new or additional information has been discovered regarding the contamination or conditions at the Site that indicate that the response and/or the conditions at the Site are no longer protective of human health or the environment for the types of uses identified in the Ready for Reuse Determination.

The types of uses identified as protective in this RfR determination remain subject to (i) applicable federal, state, and local regulation and to (ii) title documents, including, but not limited to, easements, restrictions, and institutional controls.

This RfR determination remains valid only as long as the requirements specified in the ROD, other response decision documents, and the land title documents are met.

**APPENDIX A**

# Risk Assessment Summary

A risk assessment is defined by U.S. EPA as a qualitative and quantitative evaluation of the risk posed to human health and/or the environment by the actual or potential presence and/or use of specific pollutants. A risk assessment characterizes the current or potential threat to public health and the environment that may be posed by chemicals originating at or migrating from a contaminated site. Information used in the risk assessment is taken from the remedial investigation, the stage of the U.S. EPA pipeline of activities that characterizes site conditions and determines the levels of contamination at a site.

At the South Point Plant Superfund site, a baseline risk assessment (BLRA) was prepared in 1993 as part of the remedial investigation. The term "baseline" indicates the risk assessment's assumption that remedial work had not been performed at the Site and that access to the Site was not limited in any way. Individual exposure, dose, and risk calculations were developed for three populations: trespassers, industrial workers, and residents. Superfund guidance requires that U.S. EPA evaluate a hypothetical residential exposure, however unlikely.

These calculations were then used to develop cumulative risks for the active and inactive areas at the Site. The active area, which includes source areas of the Site where industrial activities were concentrated, comprises the Mid-Plant Area and the Coke Oven Gas Blowdown Area. The inactive area, which includes areas of the Site where waste was disposed of, comprises Disposal Area D, the Northern Fly Ash Ponds, and the Eastern Disposal Area. The BLRA evaluated potential risks to human health and the environment using two measures: Excess Lifetime Cancer Risks (ELCRs) and Hazard Indices (HIs).

ELCRs describe whether exposure to carcinogenic (cancer-causing) contaminants at a site poses an unacceptable health risk to humans. ELCRs are expressed numerically, e.g, $1 \times 10^{-4}$ or $1 \times 10^{-6}$. Carcinogenic risk expressed as $1 \times 10^{-4}$ means that one out of 10,000 people exposed to contamination over a 70-year lifetime could potentially develop cancer as a result of the exposure. A carcinogenic risk of $1 \times 10^{-6}$ means that one out of 1,000,000 people exposed over a 70-year lifetime could potentially develop cancer as a result of the exposure. The carcinogenic risk range established under CERCLA designates risks less than $10^{-4}$ to $10^{-6}$ as acceptable and protective of human health. Risks greater than this range indicate that the risks pose an unacceptable carcinogenic risk to human health.

The hazard index (HI) describes whether exposure to non-carcinogenic contaminants at a site poses an unacceptable health risk to humans. Each HI represents the ratio between the estimated exposure dose and a reference dose. An HI greater than one indicates that the estimated exposure dose for that contaminant exceeds acceptable levels for protection against non-carcinogenic health effects. An HI less than one indicates that, under U.S. EPA's Hazard Indices guidelines, the contaminants pose an acceptable risk to human health.

Exhibit 4 lists the cumulative potential risks identified for current populations exposed to contamination at the South Point Plant Superfund site. Exhibit 5 lists the cumulative potential risks identified for future populations exposed to contamination at the Site. Exposure scenarios where contaminants were determined to pose a potential health risk to current or future populations at the Site are marked in bold.

**Exhibit 4.** Cumulative Potential Risks for Current Exposed Populations

| **Current Populations** | **Cumulative Potential Risks for Current Populations** | | | |
|---|---|---|---|---|
| | Inactive Area | | Active Area | |
| | ELCRs | Hazard Index | ELCRs | Hazard Index |
| On-site Industrial Workers | $7 \times 10^{-6}$ (soil and groundwater) | 0.2 | $8 \times 10^{-6}$ (soil and groundwater) | 0.1 |
| On-site Adult Trespasser | $9 \times 10^{-5}$ (soil only) | **2.6** | $1 \times 10^{-4}$ (soil only) | 0.7 |
| On-site Child Trespasser | $9 \times 10^{-5}$ (soil only) | **2.6** | $1 \times 10^{-4}$ (soil only) | 0.7 |

The cumulative risks indicated that the Site's contaminants did not exceed the carcinogenic risk range established under CERCLA for current and future exposed populations at the Site; ELCR values ranged between $l0^{-4}$ to $10^{-6}$. As Exhibit 4 and Exhibit 5 illustrate, the risk assessment conducted at the South Point Plant Superfund site indicated that the Site is safe for reuse in an industrial capacity. Within two exposure scenarios – an adult or child trespassing in the inactive area prior to the Site's remediation and any future resident of the Site – the constituents of concern did pose a potential non-carcinogenic risk greater than U.S. EPA's Hazard Indices guidelines.

**Exhibit 5.** Cumulative Potential Risks for Future Exposed Populations

| **Future Populations** | **Cumulative Potential Risks for Future Populations** | | | |
|---|---|---|---|---|
| | Inactive Area | | Active Area | |
| | ELCRs | Hazard Index | ELCRs | Hazard Index |
| On-Site Industrial Workers | $6 \times 10^{-6}$ (soil and groundwater) | 0.5 | $7 \times 10^{-6}$ (soil and groundwater) | 0.5 |
| On-Site Adult Resident | $2 \times 10^{-4}$ (soil, ground-water, surface water, and sediments) | **1.82** | $2 \times 10^{-4}$ (soil, ground-water, surface water, and sediments) | **1.72** |
| On-Site Child Resident | $5 \times 10^{-4}$ (soil, ground-water, surface water, and sediments) | **8.82** | $3 \times 10^{-4}$ (soil, ground-water, surface water, and sediments) | **6** |

**APPENDIX B**

# ABBREVIATIONS AND ACRONYMS

**AR -** Administrative Record
**BLRA/BRA -** Baseline Risk Assessment
**CC -** Construction Completion
**CERCLA** - Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (Superfund)
**CERCLIS** - Comprehensive Environmental Response, Compensation, and Liability Information System
**DOD** - U.S. Department of Defense
**DOE** - U.S. Department of Energy
**DOI** - U.S. Department of Interior
**ELCR** - Excess Lifetime Cancer Risk
**ESD** - Explanation of Significant Differences
**ESI -** Expanded Site Inspection
**FCOR -** Final Closeout Report
**FS** - Feasibility Study
**GIS** - Geographic Information System
**HI** - Hazard Index
**HRS** - Hazard Ranking System
**HWS** - Hazardous Waste Sites
**IC** - Institutional Control
**LEDC** - Lawrence Economic Development Corporation
**NER** - National Exposure Registry
**NIH** - National Institutes of Health
**NOID** - Notice of Intent to Delete
**NOD** - Notice of Deletion
**NPDES** - National Pollutant Discharge Elimination System
**NPL** - (N)ational (P)riorities (L)ist of Superfund Hazardous Waste Sites
**O&M** - Operation and Maintenance
**OEPA** - Ohio Environmental Protection Agency
**OERR** - Office of Emergency Response and Remediation
**OSWER** - Office of Solid Waste and Emergency Response
**OU** - Operable Unit
**PA -** Preliminary Assessment
**PCOR -** Preliminary Closeout Report
**PHA** - Public Health Assessment
**PRP** - Potentially Responsible Party
**RA** - Remedial Action
**RCRA** - Resource Conservation and Recovery Act of 1976
**RD -** Remedial Design
**RfR** - Ready for Reuse Determination
**RI** - Remedial Investigation
**ROD** - Record of Decision
**RPM** – Remedial Project Manager
**SARA** - Superfund Amendments and Reauthorization Act of 1986
**SI -** Site Inspection
**SNAP** - Superfund National Assessment Program Database
**SRI** - Superfund Redevelopment Initiative
**SVOC -** Semi-Volatile Organic Compound
**TEAM** - Total Exposure Assessment Methodology
**TRI** - Toxic Release Inventory
**TSDF** - Treatment, Storage, and Disposal Facility
**U.S. EPA** - United States Environmental Protection Agency
**VOC** - Volatile Organic Compound

## APPENDIX C

# GLOSSARY

*Baseline Risk Assessment (BLRA):* A qualitative and quantitative evaluation of the risk posed to human health and/or the environment by the actual or potential presence and/or use of specific pollutants at a site. A risk assessment characterizes the current or potential threat to public health and the environment that may be posed by chemicals originating at or migrating from a contaminated site.

*Carcinogenic Risk:* Risk that is obtained by an exposure event, condition, or effect that causes cancer.

*Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):* CERCLA, commonly referred to as Superfund. The law authorizes the federal government to respond directly to releases, or threatened releases, of hazardous substances that may endanger the public health, welfare, or the environment. CERCLA also enables U.S. EPA to take legal action to force parties responsible for causing the contamination to remediate those sites, or reimburse Superfund for the cost of remediation.

*Construction Completion (CC):* Construction completion identifies completion of remedial activities. In this stage, the physical construction of all remedial actions at a site is complete, all immediate threats have been addressed, and all long-term threats are under control.

*Deed restrictions:* Restrictions placed on a property's deed that control the use of the property. Restrictions travel with the deed, and cannot generally be removed by new owners.

*Dermal absorption:* Absorption through the skin.

*Discovery:* Process by which a potential hazardous waste site is brought to the attention of U.S. EPA. The process can occur through several mechanisms, such as community contact or referral by another government agency.

*Ecological risk assessment:* Assessment of the baseline risks posed by a site to ecological receptors.

*Engineering controls:* Engineering controls eliminate or reduce exposure to a chemical or physical hazard through the use or substitution of engineered machinery or equipment. An example of an engineering control is a fence.

*Expanded Site Inspection (ESI):* Functions performed to collect additional site data beyond that required for Hazard Ranking System (HRS) scoring, in order to expedite the Remedial Investigation/Feasibility Study (RI/FS) process for National Priorities List (NPL) sites. In addition to an evaluation of pathways and receptors, an ESI includes site and source characterization.

*Explanation of Significant Differences (ESD):* A significant change to a Record of Decision (ROD) that does not fundamentally alter the remedy. An ESD may be initiated by U.S. EPA or by site PRPs.

*Exposure pathways:* Exposure pathways are means by which contaminants can reach populations of people, plants, or animals. Exposure pathways include groundwater, surface water, soil exposure, and air migration.

*Feasibility Study (FS):* A study of a hazardous waste site intended to: (1) evaluate alternative remedial actions from technical, environmental, and cost-effectiveness perspectives; (2) recommend cost-effective remedial actions; and (3) prepare a conceptual design, cost estimate, and preliminary construction schedule.

*Fugitive landfill gas:* Landfill-generated gas that could reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

*Hazard Index (HI):* The hazard index (HI) describes whether exposure to non-carcinogenic contaminants at a site poses an unacceptable health risk to humans. Each HI represents the ratio between the estimated exposure dose and a reference dose. An HI greater than one indicates that the estimated exposure dose for that contaminant exceeds acceptable levels for protection against non-carcinogenic health effects. An HI less than one indicates that the contaminants do not pose a risk to human health.

*Hazard Ranking System (HRS) Scoring:* The HRS is the screening mechanism used to place sites on the NPL. In order for a site to be listed, it must have: 1) contaminants listed on U.S. EPA's Target Compound List of sufficient concentration to warrant concern; 2) a sensitive receptor population that would be negatively impacted by the contaminants; and 3) pathways of exposure that would introduce the contaminant into the sensitive receptor population. Theoretically, a site meeting these conditions would score 28.5 or higher on the HRS, the threshold for NPL listing. The report detailing the findings of a site's scoring is referred to as the "HRS Scoring Package."

*Institutional Controls (ICs):* ICs are non-engineered instruments, such as administrative and/or legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land or resource use.

*National Priorities List (NPL):* Sites are listed on U.S. EPA's National Priorities List (NPL) upon completion of Hazard Ranking System screening and public solicitation of comments about the proposed site. The identification of a site for the NPL is intended primarily to guide U.S. EPA in: identifying sites that warrant further investigation to assess the nature and extent of human health and environmental risks; identifying potential CERCLA-financed remedial actions; notifying the public about sites determined to warrant further investigation by U.S. EPA; and serving notice to potentially responsible parties that U.S. EPA may initiate CERCLA-financed remedial actions.

*NPL site deletions:* With state concurrence, U.S. EPA determines when no further response is required at a site to protect human health or the environment. U.S. EPA approves a "close-out" report verifying that response actions have been taken or that no action is required. The Agency then publishes a deletion notice in the *Federal Register*.

*NPL site listing process:* The NPL is a list of the most serious sites identified for possible long-term remediation. A final NPL site is added when U.S. EPA issues a final rule in the *Federal Register*, which enables U.S. EPA to use Trust Fund monies to pay for long-term remedial actions. U.S. EPA issues a proposed rule in the *Federal Register* to solicit comments on proposed NPL sites. U.S. EPA responds to comments and adds sites to the NPL that continue to meet requirements for listing.

*Potentially Responsible Parties (PRPs):* The Superfund law (CERCLA) allows U.S. EPA to respond to releases or threatened releases of hazardous substances into the environment. Under CERCLA, PRPs are expected to conduct or pay for a site's remediation. The Superfund enforcement program identifies site PRPs; negotiates with PRPs to fund and manage the site's remediation; and recovers U.S. EPA remediation costs from PRPs.

*Preliminary Assessment (PA):* A PA is an investigation of a site's conditions to ascertain the source, nature, extent, and magnitude of contamination.

*Preliminary Close Out Report (PCOR):* A precursor to a site's final closeout report, a site's PCOR is a report submitted by the site's Remedial Program Manager (RPM) verifying that the conditions of the site comply with the Record of Decision (ROD)'s findings and design specifications and that activities performed at the site are sufficient to achieve protection of public health and the environment.

*Operation and Maintenance (O&M):* O&M activities are conducted after remedial actions are complete at a site in order to ensure that remedies remain effective and operational over time.

*Remedial Action (RA):* The implementation of a permanent resolution to address a release or potential release of a hazardous substance from a site.

**APPENDIX D**

# SITE DEED RESTRICTION AND RESTRICTIVE COVENANTS

VOL 0015 PAGE 313

**NOTICE OF CONSENT DECREE**
**IMPOSING LIMITATIONS AND RESTRICTIONS ON PROPERTY**

This Notice, dated as of March 24, 1999, is hereby given of that certain Consent Decree (the "Consent Decree") entered on November 19, 1998 by the United States District Court for the Southern District of Ohio in Civil Action No. 98 - 700 involving the United States of America (acting on behalf of the United States Environmental Protection Agency), AlliedSignal, Inc. (f/k/a Allied Chemical Corporation), Ashland Inc. (f/k/a Ashland Oil, Inc.), Ashland Ethanol, Inc. and South Point Ethanol. The Consent Decree imposes certain limitations and restrictions including, without limitation, those restrictions and limitations imposed by Appendix F of the Consent Decree (copy attached), on property located in Lawrence County, Ohio owned by Ashland Inc., Ashland Ethanol, Inc. and/or South Point Ethanol.

The restrictions and limitations of the Consent Decree, particularly Appendix F, are incorporated by Ashland Inc., Ashland Ethanol, Inc. and/or South Point Ethanol into that certain property, described on Exhibit A, which is attached hereto, that was conveyed by Allied Chemical Corporation to Ashland Oil, Inc. by deed dated May 21, 1979 and recorded in Volume 457, Page 689, of the deed records of the Recorder's Office of Lawrence County, Ohio, a portion of which property was conveyed as follows:

(1) by Ashland Oil, Inc. to Ashland Ethanol, Inc. by deed dated December 31, 1981 and recorded in Volume 476, Page 330, of the deed records of the Recorder's Office of Lawrence County, Ohio which was subsequently conveyed by Ashland Ethanol, Inc. to South Point Ethanol by deed dated December 31, 1981 and recorded in Volume 476, Page 360, of the deed records of the Recorder's Office of Lawrence County, Ohio; said property being more particularly described on Exhibit B which is attached hereto; and

(2) by Ashland Oil, Inc. to South Point Ethanol by deed dated June 14, 1984 and recorded in Volume 493, Page 615, in the deed records of the Recorder's Office of Lawrence County, Ohio; said property being more particularly described on Exhibit C which is attached hereto.

The Consent Decree does not affect or involve the following property that was a portion of the property originally conveyed by Allied Chemical Corporation to Ashland Oil, Inc.:

(1) that certain property conveyed by Ashland Oil, Inc. to the Board of County Commissioners of Lawrence County, Ohio by deed dated November 2, 1982 and recorded in Volume 480, Page 794 of the deed records of the Recorder's Office of Lawrence County, Ohio;

(2) that certain property conveyed by Ashland Oil, Inc. to Ray Curtis Bailey and Raymond Bailey by deed dated June 4, 1984 and recorded in Volume 493, Page 530, of the deed records of the Recorder's Office of the Lawrence County, Ohio;

(3) that certain property conveyed by Ashland Oil, Inc. to the South Point, Ohio Board of Education by deed dated October 10, 1984 and recorded in Volume 496, Page 477, of the deed records of the Recorder's Office of the Lawrence County, Ohio;

(4) that certain property conveyed by Ashland Inc. to the Lawrence County Economic Development Corporation by deed dated July 7, 1997 and recorded in Volume 624, Page 789, of the deed records of the Recorder's Office of the Lawrence County, Ohio.

In witness whereof, the parties have caused this Notice of Consent Decree to be executed by properly authorized representatives as of the day and year first above written.

ASHLAND INC.
(f/k/a Ashland Oil, Inc.)

JMP David L. Hausrath
David L. Hausrath
Vice President and General Counsel

ASHLAND ETHANOL, INC.

JMP Carl A. Pecko
Carl A. Pecko
President

SOUTH POINT ETHANOL

Bradley C. Hall
Bradley C. Hall
Chairman - - Management Committee

State of Kentucky )
) SS:
County of Kenton )

On this, the 24th day of March, 1999, before me, the undersigned officer, personally appeared David L. Hausrath, who acknowledged himself to be the Vice President and General Counsel of Ashland Inc., a Kentucky corporation, and that he, as such officer, being authorized so to do, executed the foregoing instrument for purposes therein contained, by signing the name of the corporation by himself as Vice President and General Counsel of Ashland Inc.

MARY ELLEN HARDY NOTARY PUBLIC STATE AT LARGE, KY.

Mary Ellen Hardy
Notary Public

My Commission expires: July 14, 1999.

State of Kentucky )
) SS:
County of Kenton )

On this, the 24th day of March, 1999, before me, the undersigned officer, personally appeared Carl A. Pecko, who acknowledged himself to be the President of Ashland Ethanol, Inc., a Delaware corporation, and that he, as such officer, being authorized so to do, executed the foregoing instrument for purposes therein contained, by signing the name of the corporation by himself as President, of Ashland Ethanol, Inc.

MARY ELLEN HARDY NOTARY PUBLIC STATE AT LARGE, KY.

Mary Ellen Hardy
Notary Public

My Commission expires: July 14, 1999.

State of Pennsylvania )
) SS:
County of Montgomery )

On this, the 8th day of April, 1999, before me, the undersigned officer, personally appeared Bradley C. Hall, who acknowledged himself to be the Chairman of the Management Committee of South Point Ethanol, an Ohio general partnership, and that he, as such officer, being authorized so to do, executed the foregoing instrument for purposes therein contained, by signing the name of the partnership by himself as Chairman of the Management Committee of South Point Ethanol.

Notary Public

My Commission expires: _____.

Notarial Seal
Lynn S. Quinn, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires Sept. 6, 1999

LYNN S. QUINN COMMONWEALTH OF PENNSYLVANIA NOTARY PUBLIC

LAWRENCE COUNTY, OHIO
PRESENTED FOR RECORD AT:
99 MAY 11 PM 1:20
OR REC. 15 PAGE 313
SUE ANN DEEDS, RECORDER

003998

66.00
8.00 MN
74.00

This Instrument Prepared By:

J. Michael Peffer, Esq.
50 E. RiverCenter Blvd.
Covington, KY 41012-0391

## APPENDIX F: DEED RESTRICTIONS AND RESTRICTIVE COVENANTS

Ashland Inc., Ashland Ethanol, Inc., and South Point Ethanol, An Ohio General Partnership, agree to enact the following deed restrictions and restrictive covenants on its property (as described in the Consent Decree, Paragraphs 9A and 9B):

Deed Restrictions

1. No building, structure or other object shall be built or placed on the Site that would disturb the cap over the landfills or would otherwise disturb any component of the remedy at the Site. Further, no one shall use surface or ground water from the Site for any purpose, including but not limited to human or animal consumption.

Restrictive Covenants

1. The owner and/or occupant of the above-described premises covenants that he/she shall not engage in, cause or allow the drilling, construction, installation, development, operation or use of any well for potable water at, on or within said property;

2. The owner and/or occupant of the above-described premises covenants that he/she shall not engage in, cause or allow drilling, construction, installation, development, operation on or within said property that will damage, disturb, displace or destroy the protective cap or any other component of the remedy that has been placed on or within said property;

3. The owner and/or occupant of the above-described premises covenants that he/she shall not engage in, cause or allow the construction, installation, development, operation or use of the surface water at, on or within said property;

4. The owner and/or occupant of the above-described premises covenants that each deed, title, lease or other instrument conveying an interest in said property shall contain and be subject to the foregoing restrictions;

5. The owner and/or occupant of the above-described premises covenants that he/she shall take all reasonable and appropriate measures to the extent of her property rights to prevent or preclude the drilling, construction, installation, development, operation or use of any well for potable water at, on or within said property by any other person; and

6. The owner and/or occupant of the above-described premises covenants that he/she shall limits its use to commercial/industrial purposes only.

Said covenants shall run with the land, shall be binding

upon any and all successors in interest, and all assignees, lessees, sublessees, operators, tenants, licensees and agents, and any and all persons who acquire any interest in the property, and shall be for the benefit of Ashland Inc., Ashland Ethanol, Inc., and South Point Ethanol, An Ohio General Partnership, the United States Environmental Protection Agency ("EPA"), Protection Agency, and shall be privileged to enforce these covenants by appropriate action in a court of competent jurisdiction.

# EXHIBIT A

Being three Tracts of land situated in Perry Township, Lawrence County, and partially in the Village of South Point, Ohio and being part of Sections 29 and 32 and Fractional Sections 30 and 31 of T-2, R-17 of the Ohio River Survey and being more particularly described as follows:

## TRACT NO. 1

Beginning at a cut cross in the centerline of County Road No. 1, said cut cross marking the corner of Sections 29, 30, 31 and 32 of T-2, R-17 of the Ohio River Survey;

thence, with the centerline of County Road No. 1 and the west line of Section 29, N5° 37' 00" E passing a "P.K." nail at 1049.92 feet, in all 2764.63 feet to a "P.K." nail;

thence, leaving the aforesaid Section line and continuing with the said centerline, 256.67 feet, on a curve to the left having a radius of 11,459.16 feet the chord of which bears N4° 58' 30" E. 256.66 feet, to a "P.K." nail;

thence with the aforesaid centerline, N4° 20' 00" E 218.24 feet to a railroad spike;

thence, leaving said centerline and with the line of James King Vol. 236, Pg. 273, S84° 55' 20" E, passing a concrete monument at 80.01 feet, in all 306.08 feet to a concrete monument on the west line of Lot No. 24 of the Ohio Valley Truck Farms, Plat Book 2, Page 214;

thence S5° 43' 13" W 162.65 feet to a concrete monument at the southwest corner of Lot No. 25;

thence S84° 05' 04" E 598.89 feet to a concrete monument at the southeast corner of Lot No. 37;

thence N5° 43' 40" E 80.75 feet to a concrete monument at the corner of Lots 36, 37, 48 and 49;

thence S84° 05' 14" E 599.58 feet to a concrete monument at the corner of Lots 60, 61, 72 and 73;

thence S5° 47' 33" W 83.19 feet to a concrete monument at the southwest corner of Lot No. 73;

thence S84° 39' 26" E 237.77 feet to a concrete monument on the south line of Lot No. 73;

thence, leaving the line of the Ohio Valley Truck Farm, S27° 43' 37" E 67.98 feet to an iron pin in the west right of way line of County Road 60;

thence S27° 43' 37" E 114.01 feet to a point on the east right of way line of County Road 60;

thence, with said right of way, S27° 43' 37" E 983.78 feet to a concrete monument;

thence 68.46 feet, on a curve to the left having a radius of 165.99 feet the chord of which bears S39° 32' 37" E 67.98 feet, to an iron pin;

thence N38° 38' 23" E 2.14 feet to a concrete monument 120 feet right of centerline Station 967 + 08.85 of U. S. Route 52;

thence, with the west right of way line of U.S. Route 52, S21° 49' 21" E, passing an iron pin on the west right of way line of County Road 60 at 123.40 feet, 161.49 feet in all to a concrete fence post 119.99 feet right of centerline Station 968 + 70.34;

thence S21° 49' 14" E 1329.66 feet to a concrete fence post 120 feet right of centerline Station 982 + 00;

thence S1° 31' 00" E 158.50 feet to a concrete monument 175 feet right of centerline Station 983 + 48.65;

thence S21° 49' 15" E 560.15 feet to a point 175 feet right of centerline Station 989 + 08.80;

thence S29° 11' 13" E 117.00 feet to an iron post 160 feet right of centerline Station 990 + 24.83;

thence S21° 49' 15" E 275.17 feet to a concrete monument 160 feet right of centerline Station 993 + 00;

thence S20° 52' 34" E 909.61 feet to an iron post 175 feet right of centerline Station 1001 + 67;

thence S21° 49' 15" E 483.00 feet to a concrete monument 175 feet right of centerline Station 1006 + 50;

thence S33° 53' 39" E 286.73 feet to a concrete monument 115 feet right of centerline Station 1009 + 30.38;

thence S21° 49' 15" E 494.32 feet to a concrete monument 115 feet right of centerline Station 1014 + 24.70;

thence 136.34 feet, on a curve to the left having a radius of 5207.93 feet the chord of which bears S22° 34' 15" E 136.34 feet, to a concrete monument 115 feet right of Centerline Station 1015 + 58.03;

thence 17.48 feet, on a curve to the left having a radius of 3934.72 the chord of which bears S23° 26' 53" E 17.48 feet, to a concrete fence post 115 feet right of Centerline Station 1015 + 75;

thence S66° 25' 29" W 330.00 feet to an iron post 445 feet right of Centerline Station 1015 + 75;

thence S23° 57' 19" E 55.83 feet to an iron post 445 feet right of Centerline Station 1016 + 25;

thence N65° 40' 29" E 330.00 feet to an iron post 115 feet right of Centerline Station 1016 + 25;

thence 889.98 feet, on a curve to the left having a radius of 3934.70 feet the chord of which bears S30° 48' 18" E 888.08 feet, to a concrete fence post 115 feet right of Centerline Station 1024 + 88.96;

thence 72.65 feet, on a curve to the left having a radius of 5207.93 feet the chord of which bears S37° 41' 08" E 72.65 feet, to a concrete monument 115 feet right of Centerline Station 1025 + 60;

thence S58° 19' 05" E 67.59 feet to a concrete monument 92 feet right of Centerline Station 1026 + 22.29;

thence S38° 46' 45" E 32.02 feet to a concrete monument 92 feet right of Centerline Station 1026 + 54.31;

thence, leaving the west right of way line of U. S. Rte. 52 and with the end of a frontage road, N84° 23' 17" W 32.27 feet to an iron pin corner to M. B. Rucker, Vol. 225, Pg. 87;

thence, with the lines of Rucker, C. Whitley, Vol. 297, Pg. 77, the Tri-State Bible College, Vol. 408, Pg. 482, the Tri-State View Subdivision Plat Book 3, Page 120, John Renfro, Vol. 219, Pg. 86, and the Sunny Valley Subdivision Plat Bk. 5, Pg. 124, N84° 23' 15" W, passing a concrete monument at 1609.28 feet, in all 2830.31 feet to a concrete monument;

thence, continuing with the Sunny Valley Subdivision, S5° 30' 29" W 1243.46 feet to a concrete monument;

thence, with the line of the South Point Christian Church, Vol. 305, Page 90, S5° 31' 40" W 299.86 feet to a concrete monument;

thence S5° 29' 30" W 699.63 feet to a concrete monument on the South line of Section 32;

thence, with the south line of Section 32, N84° 29' 19" W 100.54 feet to a concrete monument on the east right of way line of the Norfolk & Western Railroad;

thence, with said right of way, N48° 54' 39" W 791.85 feet to a "P.K." nail at the centerline of the former "Ohio River Road" from which a concrete monument bears N63° 03' 40" E 80.21 feet;

thence N22° 39' 51" W 1030.13 feet to a "P.K." nail on the centerline of said road from which a concrete monument bears N69° 14' 55" E 80.04 feet;

thence N18° 50' 49" W 1459.50 feet to a "P.K." nail on the centerline of said road from which a concrete monument bears N77° 19' 15" E 80.19 feet;

thence N12° 27' 47" W 382.00 feet to a "P.K." nail on the centerline of County Road No. 1 from which a concrete monument bears N75° 49' 29" E 80.04 feet;

thence N15° 53' 25" W 1267.10 feet to a "P.K." nail on the centerline of County Road No. 1 from which a concrete monument bears N74° 06' 35" E 80.00 feet;

thence 536.64 feet, on a curve to the right having a radius of 1429.61 feet the chord of which bears N5° 08' 14" W 533.49 feet, to a "P.K." nail from which a concrete monument bears S84° 23' 00" E 80.00 feet;

thence N5° 37' 00" E, passing a "P.K." nail at 302.00 feet, in all 651.88 feet to the cut across point of beginning containing 533.205 acres and having all bearings based on the magnetic meridian of 1941.

TRACT NO. 2

Beginning at a cut cross in the centerline of County Road No. 1, said cut cross marking the corner of Sections 29, 30, 31 and 32, T-2, R-17 of the Ohio River Survey:

thence, with the centerline of County Road No. 1 and the east line of Section No. 31, S5° 37' 00" W 349.88 feet to a "P.K." nail in the centerline of County Road No. 1;

thence, leaving the centerline of County Road No. 1 and with the line of Margaret and James Ferguson, Vol. 166, Pg. 98, the following courses and distances, N84° 23' 29" W, passing as a witness a concrete monument at 50.00 feet, 270.90 feet to a concrete monument, S54° 01' 19" W 68.22 feet to an iron pin (reset), S45° 04' 04" W 113.70 feet to a stone, S48° 53' 49" W 258.45 feet to an iron pipe, S58° 12' 42" W 67.19 feet to an iron pin on the east right of way line of the Norfolk & Western Railroad;

thence, leaving the line of Ferguson and with the east right of way line of the Norfolk & Western Railroad 2002.81 feet on a curve to the right having a radius of 21,544.9 feet the following chords, N12° 07' 17" W 748.06 feet to a point on the south line of Section 30 from which a monument bears N84° 20' W 1.21 feet, N10° 59' 38" W 100.63 feet to a point, N9° 19' 30" W 1153.94 feet to a concrete monument (former car axle) corner to Andrew J. Dolin, Vol. 372, Pg. 289;

thence, leaving said right of way line and with the lines of Andrew J. Dolin, Kenneth McFann et al Vol. 312, Pg. 394, Gladys Dills, Vol. 398, Pg. 92 and Vol. 343, Pg. 381 and Robert B. and Anna J. Holbrook, Vol. 301, Page 54 and Vol. 207, Pg. 546, S84° 44' 48" E passing a stone at 534.32 feet and 880.56 feet, in all 918.54 feet to a stone corner to Wm. B. Scherer, Vol. 402, Pg. 403;

thence, with the lines of Scherer, S5° 36' 49" W 169.62 feet to a stone, S84° 43' 50" W passing a stone at 230.36 feet, in all 260.36 feet to a "P.K." nail on the centerline of County Road No. 1;

thence, with the said centerline (also being the east line of Section 30), S5° 37' 00" W 1049.92 feet to the cut across point of beginning containing 35.953 acres and having all bearings based on the magnetic meridian of 1941.

TRACT NO. 3

Beginning at a stone, on the west right of way line of the Norfolk & Western Railroad, which bears N84° 44' 48" W 107.78 feet from the concrete monument marking the Northwest corner of Tract No. 2 herein, said stone being the common corner of Ashland Oil & Refining Company, Vol. 206, Pg. 74;

thence, with the west right of way line of the Norfolk & Western Railroad, 1152.98 feet on a curve to the left having a radius of 21,649.9 feet the chord of which bears S9° 15' 07" E 1152.84 feet to an Iron pin;

thence N84° 22' 39" W 5.22 feet to an iron pin;

thence 100.52 feet, on a curve to the left having a radius of 21,654.9 feet the chord of which bears S10° 54' 27" E 100.52 feet to an iron pin on the south line of Section 30;

thence S84° 20' 37" E 5.22 feet to an iron pin;

thence 1424.75 feet, on a curve to the left having a radius of 21,649.9 feet the following chords S12° 06' 39" E 806.47 feet to a point, S13° 59' 44" E 618.15 feet to an iron post from which a concrete monument bears N14° 49' W 1.43 feet, said iron post being 65 feet left of Valuation Station 121 + 74.5 and marking the point of curvature of the aforesaid right of way;

thence, continuing with said right of way, S14° 48' 50" E 326.55 feet to an iron post from which a concrete monument bears S86° 08' E 2.68 feet;

thence S85° 42' 50" W 5.09 feet to an iron post from which a concrete monument bears S88° 52' E 2.55 feet;

thence S14° 48' 50" E 310.71 feet to an iron post from which a concrete monument bears S89° 48' E 3.05 feet and another monument bears N17° 59' W 8.81 feet;

thence leaving the N & W right of way line S85° 42' 50" W 347.13 feet to a concrete monument on the top of the high bank of the Ohio River;

thence, down river and with the high bank the following courses and distances, N14° 50' 06" W 310.73 feet to an iron pin, N13° 38' 00" W 772.39 feet to a concrete monument, N12° 43' 45" W 1041.02 feet to a concrete monument, N10° 24' 49" W 100.04 feet to a stone, N8° 25' 40" W 1146.28 feet to a stone on the line of Ashland Oil & Refining Company, Vol. 206, Pg. 74.

thence, with said line S84° 44' 48" E 343.76 feet to the stone point of beginning containing 25.965 acres and having all bearings based on the magnetic meridian of 1941, there is also included those lands between the high bank and the mean low water of the Ohio River being an addition 15.2 acres for a total of 41.2 acres more or less;

there is excluded herein a tract of land RESERVED by Ashland Oil & Refining Company in Vol. 206, Pg. 183 and being more particularly described as follows:

beginning at a stone on the North line of Tract No. 3 which bears N84° 44' 48" W 343.76 feet from the herein described point of beginning;

thence, with said north line, S84° 44' 48" E 20.00 feet to an iron pin;

thence S8° 25' 40" E 20.00 feet to an iron pin;

thence N84° 44' 48" W 20.00 feet to an iron pin;

thence N8° 25' 40" W 20.00 feet to the stone point of beginning containing 0.009 acres.

The Solvay Process Company was merged into Allied Chemical & Dye Corporation on October 28, 1947, a copy of which certificate of merger was filed with the Secretary of State of Ohio. Allied Chemical & Dye Corporation thereafter, on April 28, 1958, by certificate filed with the Secretary of State of Ohio changed its named to Allied Chemical Corporation.

The total acreage for all three of the above described tracts being 610.3 acres more or less. A survey of this property was made on January 9, 1979 and revised on March 1, 1979 and April 19, 1979 by Lawrence R. Wells, Registered Professional Surveyor, Registration No. 6471.

The above-described three tracts are composed of the following Lawrence County, Ohio tax parcel numbers:

15-123-0200
15-139-0600
15-145-1500
15-145-1600
16-070-0100

**EXHIBIT B**

Nine (9) tracts or parcels of property in Perry Township and the Village of South Point in Lawrence County, Ohio, said tracts or parcels being more particularly described and shown as lots numbered 2 through 10 (herein called the "Lots"), on the plat of the survey, prepared by Laurence R. Wells, Professional Surveyor No. 6471, which is recorded in Plat Book 9 at page 101.

The Lots are composed of the following Lawrence County, Ohio tax parcel numbers:

15-123-0201
15-123-0202
15-123-0203
15-123-0204
15-145-1501
15-145-1502
15-145-1503
15-145-1504
15-145-1601
16-070-0101

# EXHIBIT C

Four parcels of land in Perry Township, Lawrence County, Ohio:

**Parcel I**

Being part of Section 29, Township 2, Range 17, and being more particularly described as follows:

Commencing at the southwest corner of Section 29; thence, with the south line of Section 29, South 84° 19' 07" East 1,628.52 feet to a point on the west line of Lot No. 2 of those lands conveyed to South Point Ethanol by deed recorded in Volume 476 at Page 360; thence, with the west line of Lot No. 2, North 5° 37' 48" East 273.87 feet to a one-inch iron pipe; thence, with the north line of Lot No. 2, South 84° 22' 12" East 361.00 feet to a one-inch iron pipe being the true point of beginning of this description; thence North 5° 37' 48" East 36.56 feet to a 1" iron pipe; thence South 84° 22' 12" East 70.50 feet to a one-inch iron pipe; thence South 5° 37' 48" West 36.56 feet to a one-inch iron pipe on the north line of Lot No. 2; thence North 84° 22' 12" West 70.50 feet to the point of beginning, containing 0.059 acres as surveyed and described by Laurence R. Wells, Registered Land Surveyor No. 6471.

The above-described parcel of land is currently listed as Auditor's Duplicate No. 15-123-0206

**Parcel II**

Being part of Section 29, Township 2, Range 17, and being more particularly described as follows:

Commencing at the southwest corner of Section 29; thence with the south line of Section 29, South 84° 19' 07" East 903.53 feet to a point; thence North 5° 37' 48" East 273.22 feet to a one-inch iron pipe, said iron pipe being the southwest corner of Lot No. 3 of those lands conveyed to South Point Ethanol of record in Volume 476 at Page 360 and also being the true point of beginning for this description; thence North 84° 22' 12" West 19.01 feet to a one-inch iron pipe; thence North 5° 37' 48" East 346.46 feet to a one-inch iron pipe; thence South 84° 22' 12" East 19.01 feet to a one-inch iron pipe at the northwest corner of Lot No. 3; thence, with the west line of Lot No. 3, South 5° 37' 48" West 346.46 feet to the point of beginning, CONTAINING 0.151 acres as surveyed and described by Laurence R. Wells, Registered Land Surveyor No. 6471.

The above-described parcel of land is currently listed as Auditor's Duplicate No. 15-123-0207.

# EXHIBIT C

**Parcel III**

Being part of Section 32, Township 2, Range 17, and being more particularly described as follows:

Commencing at the northwest corner of Section 32; thence with the north line of Section 32, South 84° 19' 07" East 1,989.52 feet to a point; thence South 5° 37' 48" West 1,749.25 feet to a one-inch iron pipe, said iron pipe being the southwest corner of Lot No. 2 of those lands conveyed to South Point Ethanol of record in Volume 476 at Page 360 and also being the true point of beginning of this description; thence North 84° 22' 12" West 20.00 feet to a one-inch iron pipe; thence North 5° 37' 48" East 635.00 feet to a one-inch iron pipe on the line of Lot No. 2; thence, with the line of Lot No. 2, South 5° 37' 48" West 20.00 feet to a one-inch iron pipe; thence, continuing with the line of Lot No. 2, North 84° 22' 12" West 305.00 feet to a one-inch iron pipe; thence, continuing with the line of Lot No. 2, South 5° 37' 48" West 615.00 feet to the point of beginning, CONTAINING 0.432 acres as surveyed and described by Laurence R. Wells, Registered Land Surveyor No. 6471.

The above-described parcel of land is currently listed as Auditor's Duplicate No. 15-145-1505.

**Parcel IV**

Being part of Section 32, Township 2, Range 17, and being more particularly described as follows:

Commencing at the northwest corner of Section 32; thence, with the north line of Section 32, South 84° 19' 07" East 1,554.29 feet to a point; thence South 5° 37' 48" West 619.64 feet to a one-inch iron pipe, said iron pipe being the true point of beginning of this description and further being the southwest corner of Lot No. 9 of those lands conveyed to South Point Ethanol and recorded in Volume 476 at Page 360; thence, with the south line of Lot No. 9 South 84° 22' 12" East 118.66 feet to a point; thence, with the east line of Lot No. 9, North 5° 37' 48" East 123.83 feet to a one-inch iron pipe; thence, leaving the line of Lot No. 9, South 84° 22' 12" East 44.00 feet to a one-inch iron pipe; thence South 5° 37' 48" West 150.83 feet to a one-inch iron pipe; thence North 84° 22' 12" West 162.66 feet to a one-inch iron pipe; thence North 5° 37' 48" East 27.00 feet to the point of beginning, CONTAINING 0.226 acres as surveyed and described by Laurence R. Wells, Registered Land Surveyor No. 6471.

The above-described parcel of land is currently listed as Auditor's Duplicate No. 15-145-1506.