AMENDED FINAL PLAN OF REMEDIAL ACTION

Summit Landfill Site

0 Lorewood Grove Rd
Middletown, Delaware

February 2014
DNREC Project No. DE-0074

This Amended Final Plan of Remedial Action (Final Plan) presents the Department of Natural Resources and Environmental Control's (DNREC's) intention to address environmental contamination at the Summit Landfill Site.

DNREC issued public notice of the Amended Proposed Plan of Remedial Action (Proposed Plan) for the Summit Landfill Site on February 2, 2014 and opened a 20-day public comment period. The Amended Proposed Plan is attached. There were no comments from the public; therefore, the Amended Proposed Plan is adopted as the Final Plan.

Approval:
This Amended Final Plan meets the requirements of the Hazardous Substance Cleanup Act.

Timothy T. Ratsep, Program Administrator
Site Investigation and Restoration Section

February 25, 2014
Date

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AMENDED PROPOSED PLAN OF REMEDIAL ACTION

Summit Landfill
Middletown, DE
DNREC Project No. DE-0074

February 2014

Delaware Department of Natural Resources and Environmental Control
Division of Air and Waste Management
Site Investigation & Restoration Branch
391 Lukens Drive
New Castle, Delaware 19720

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AMENDED PROPOSED PLAN OF REMEDIAL ACTION

Summit Landfill
Middletown, DE
DNREC Project No. DE-0074

Approval:
This Proposed Plan meets the requirements of the Hazardous Substance Cleanup Act.

Approved by:

Timothy Ratsep, Environmental Program Administrator
Site Investigation & Restoration Section

January 28, 2014
Date

What is the Second Amended Proposed Plan of Remedial Action?

The Proposed Plan of Remedial Action (Proposed Plan) summarizes the clean-up (remedial) actions that are being proposed to address contamination found at the Site. The Proposed Plan is issued to solicit public comment. A legal notice is published in the newspaper for a 20-day comment period. The Department of Natural Resources and Environmental Control (DNREC) considers and addresses all public comments received and subsequently publishes a Final Plan of Remedial Action (Final Plan) for the Site.

When new information is identified after a Proposed Plan has been issued, an Amended Proposed Plan must be issued to once again solicit public comment. DNREC uses a comprehensive assessment, which includes the additional data, to develop the new proposal for remedial action at the Site. This is the Amended Proposed Plan of Remedial Action.

What is the Summit Landfill Site?

The Site is a Delaware HSCA site and is currently a vacant property located between Lorewood Grove Road and the C&D Canal, Middletown, DE 19701. The Site consists of tax parcel 1300240126, is approximately 17 acres in size and is owned by Mr. and Mrs. Carmen Micucio, Sr. See Figure 1 for location map.

What happened at the Summit Landfill Site?

The Site was operated as a quarry prior to 1969. In 1969 the Site was permitted as a solid waste landfill. The landfill received refuse from the Chrysler Assembly Plant in Newark, Delaware. Materials deposited at the landfill included broken wooden pallets, paper, cardboard, upholstery, carpet, broken glass, and paint booth sludge. The landfill ceased operations in 1979. Currently the Site is undeveloped.

Why is the Amended Proposed Plan of Remedial Action necessary for the Summit Landfill Site?

The Final Plan of Remedial Action for the Site included the placement if a Groundwater Management Zone (GMZ) stating that no groundwater wells shall be installed and no groundwater shall be withdrawn from any well on the Site without the prior written approval of DNREC-SIRS. An Environmental Covenant was placed on the Site in 2011 stating that no groundwater wells shall be installed, and no groundwater shall be withdrawn from any well on the Site without the prior written approval of DNREC-SIRS. It was determined that placement of the GMZ was no longer required since the conditions are included in the Environmental Covenant that effectively prohibit installation of groundwater wells and groundwater withdrawal without written approval from DNREC-SIRS.

What is the environmental problem at the Summit Landfill Site?

The Facility Evaluation (FE) for the Site showed various metals in groundwater and iron in surface water. Volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and arsenic in were found in soil and sediment. The FE concluded that the Site was minimally contaminated and did not present a risk to human health. Site groundwater should not be used for potable water sources due to aesthetic problems associated with high iron and manganese content.

What clean-up actions have been taken at the Summit Landfill Site?

A removal action was completed for the Site in 3 phases that removed a total of approximately 296 drums from the Site. Phase I (8/24/92) removed a total of 97 drums that contained material, and 150 drums which were empty. During Phase II (3/29/93) a total of 49 drums were removed. Twenty-one drums contained material and 28 empty drums were recovered. Phase III (8/2/93) included a surface investigation, soil sampling, and restoration work.

What does the owner want to do at the Summit Landfill Site?

The property owner, Mr. Carmen Mucucio currently uses the property for hunting and recreation use. Future commercial use may also be planned for the Site.

What additional clean-up actions are needed at the Summit Landfill Site?

DNREC proposes the following remedial action for the Site, which need to be completed before a Certificate of Completion of Remedy (COCR) can be issued:

1. Develop and implement a DNREC-approved Long-Term Stewardship (LTS) Plan. The LTS Plan will assure that the enacted protective measures are properly maintained in order to ensure the long-term integrity of the remedy.

2. Record an Environmental Covenant, consistent with Delaware's Uniform Environmental Covenants Act (Title 7, Del. Code Chapter 79, Subtitle II) (UECA), in the office of the Recorder of Deeds to include the following:

    - Restrict land use to non-residential (e.g. commercial/industrial);
    - Prohibit interference with remedy;
    - Prohibit land-disturbing activities without prior written approval by DNREC;
    - Prohibit the installation of groundwater wells for drinking water purposes, and no groundwater withdrawal without the prior written approval of DNREC;
    - Comply with the Long-Term Stewardship Plan.

What are the long term plans for the Site after the cleanup?

The Site will be restricted to private hunting and possible future commercial use, with Site reuse limited through the use of an Environmental Covenant. All other requirements set forth in the Environmental Covenant shall be adhered to.

How can I find additional information or comment on the Proposed Plan?

The complete file on the Site, including the Brownfields Investigation Report, is available at the DNREC office, 391 Lukens Drive in New Castle, 19720. Most documents are also found on:

http://www.nav.dnrec.delaware.gov/DEN3/

The 20-day public comment period begins on February 2, 2014, and ends at close of business (4:30 pm) on February 24, 2014. Please send written comments to the DNREC office at 391 Lukens Drive, New Castle, DE 19720 to Wendy March, Project Manager, or Robert Newsome, Public Information Officer.

Figure 1: Summit Landfill Location
Figure 2: View of Summit Landfill from Lorewood Grove Road
Figure 3: View of Summit Landfill by Crystal Run
Figure 4: Summit Landfill

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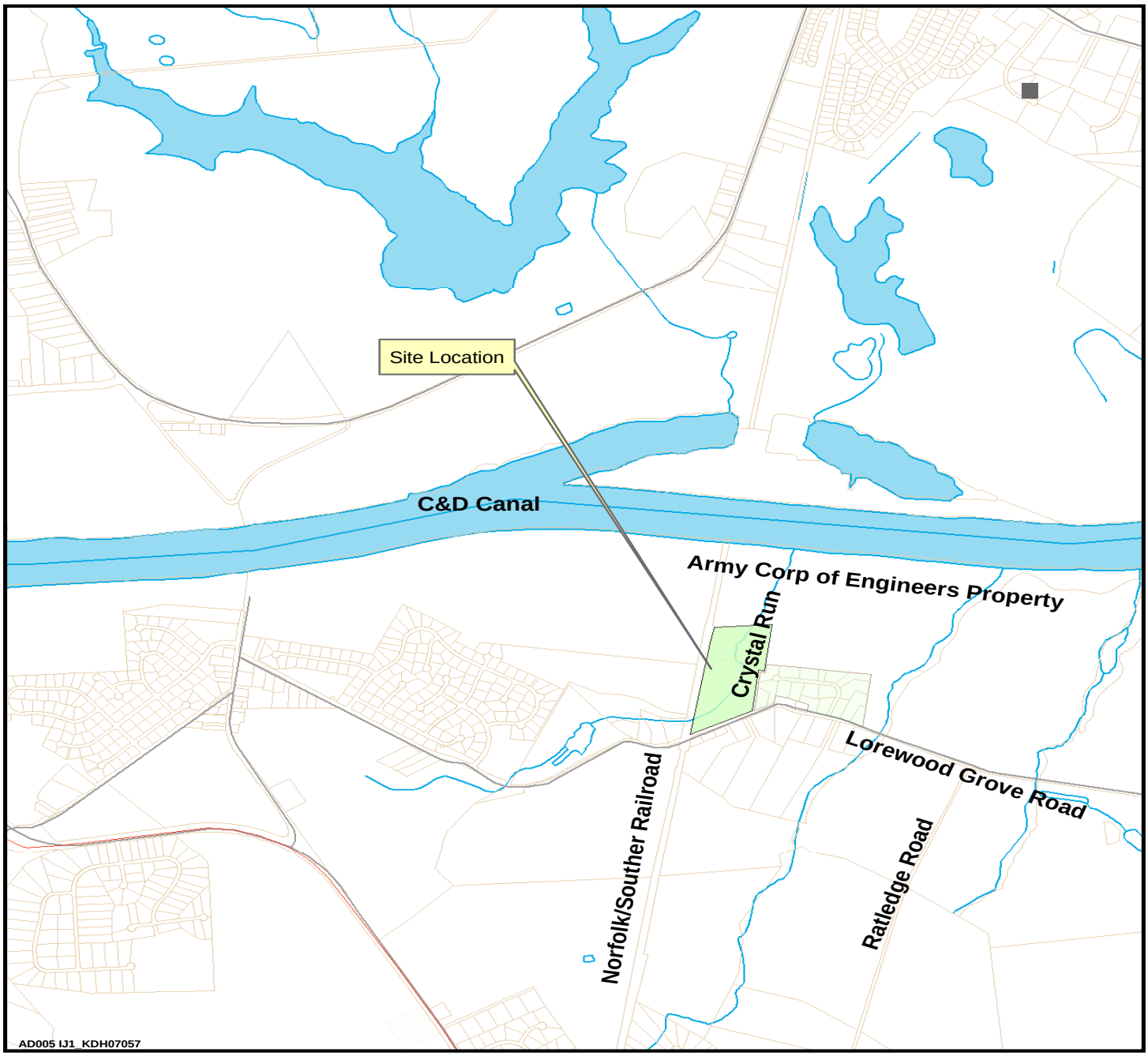

Figure 1. Summit Landfill Location

Figure 2. View of Summit Landfill from Lorewood Grove Road

Figure 3. View of Summit Landfill by Crystal Run

Figure 4. Summit Landfill

Glossary of Terms
Used in this Proposed Plan

Contamination	The introduction of harmful or hazardous matter into the environment.
Certificate of Completion of Remedy (COCR)	A formal determination by the Secretary of DNREC that remedial activities required by the Final Plan of Remedial Action have been completed.
Environmental Covenant	A restriction on the specific condition and use of a property, such as a requirement that the property will be used only for residential purposes. These covenants are sometimes called deed restrictions.
Exposure	Contact with a substance through inhalation, ingestion, or direct contact with the skin. Exposure may be short term (acute) or long term (chronic).
Facility Evaluation (FE)	An environmental study of a site including sampling of soils, groundwater, surface water, sediment and/or wastes on the property.
Final Plan of Remedial Action	DNREC's proposal for cleaning up a hazardous site after it has been reviewed by the public and finalized.
Groundwater Management Zone (GMZ)	A three dimensional region containing groundwater being managed to mitigate impairment caused by the release of contaminants of concern at a remediation site.
Hazardous Substance Cleanup Act (HSCA)	Delaware Code Title 7, Chapter 91. The law that enables DNREC to identify parties responsible for hazardous substances releases and requires cleanup with oversight of the Department.
Proposed Plan of Remedial Action	A plan for cleaning up a hazardous site submitted by DNREC and subject to public comments.
Risk	Likelihood or probability of injury, disease, or death.
Risk based concentration (RBC)	The concentration levels for individual chemicals that correspond to a specific cancer risk level of 1×10^{-6}
Site Investigation (SI)	An environmental study of a site including sampling of soils, groundwater, surface water, and sediment.
VOC	Volatile organic compound