FINAL PLAN OF REMEDIAL ACTION

Burns and McBride

South Market and A Streets
Wilmington, Delaware

August 19, 2008
DNREC Project No. DE-0325

This Revised Final Plan of Remedial Action (Final Plan) presents the Department of Natural Resources and Environmental Control's (DNREC's) requirements to address environmental contamination at the Burns and McBride Site (Site).

DNREC issued public notice of the Revised Proposed Plan of Remedial Action (Proposed Plan) for the Site on July 23, 2008 and opened a 20-day public comment period. The Proposed Plan is attached. There were no comments or questions from the public. Therefore, the Proposed Plan is adopted as the Final Plan.

Final Plan will consist of the following requirements:

- Removal of arsenic, lead and petroleum contaminated soil from hotspot areas as approved by DNREC during the remedial action.
- Removal of underground storage tanks and associated petroleum impacted soil.
- Placement of a 2 foot thick soil cap of DNREC approved soil or equivalent as determined by DNREC.
- Implementation of an environmental oversight program, including an approved Contaminated Materials Management Plan, during redevelopment to protect workers and properly dispose of excavated soil and recovered groundwater.
- Design and installation of a Vapor Barrier beneath occupied buildings, if necessary after post remediation evaluation and sampling of soil and groundwater.
- Placement of an Environmental Covenant (EC), consistent with the Uniform

Environmental Covenants Act (UECA), that will require DNREC notification prior to any soil disturbance and restrict the use of groundwater through the existing City of Wilmington Groundwater Management Zone (GMZ).

- Compliance with a DNREC-approved Operations and Maintenance (O&M) Plan within 90 days of the final redevelopment, including if deemed necessary groundwater monitoring.

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

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Kathleen Stiller Banning, Program Manager II
Site Investigation and Restoration Branch

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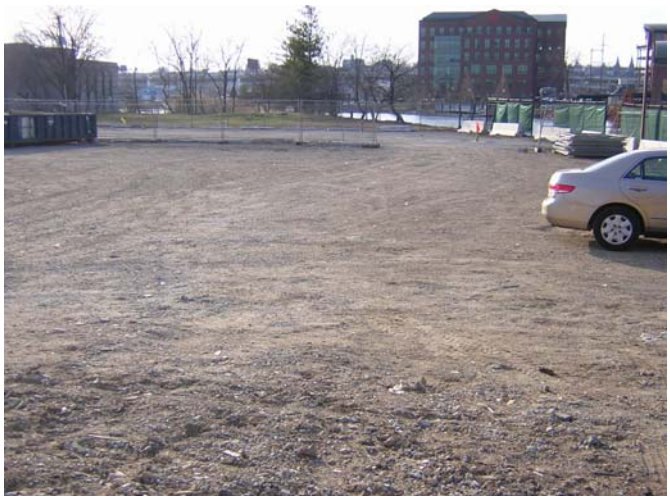
PROPOSED PLAN OF REMEDIAL ACTION

Former Burns and McBride Site
Wilmington, Delaware
DNREC Project No. DE-0325



July 2008

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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PROPOSED PLAN OF REMEDIAL ACTION

Former Burns & McBride Site
Wilmington, Delaware
DNREC Project No. DE-0325

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

Approved by:
James D. Werner, Director Division of Air & Waste Management
Date

What is the Former Burns & McBride Site?

The Former Burns and McBride site (the Site) is located at 101 South Market Street within the city limits of Wilmington, Delaware. The developer, BPG Land Partners IV, LLC (BPG), plans to develop the site for commercial and/or residential purposes. While the redevelopment plans are being finalized, the Site is currently being used as a temporary parking lot. BPG Land Partners IV, LLC (BPG) plans to cleanup the site to unrestricted use criteria, which is the most protective level of cleanup, because the redevelopment plans have not been finalized. The property is depicted on Figures 1 and 2.

Tax Parcel Numbers: 26-043.00-010
Address: 101 S. Market Street, Wilmington
Nearest major intersection: South Market Street and A Street
Area: 1.29 acres
Surrounding Property: Surrounding land use is commercial and residential
Zoning: Commercial
Site Utilities: Water and sewer service provided by the City of Wilmington. Electric service provided by Delmarva Power.
Surface water: The Christina River borders the site to the north.
Topography: The Site is approximately 0.1 to 0.4 feet above mean sea level and the surface is relatively flat with a slight slope toward the Christina River. The Site consists of fill placed behind a concrete bulkhead that runs along the Christina River shore on the northern boundary of the Site.
Groundwater: Groundwater is shallow at the Site and ranged from approximately 5 to 8 feet below ground surface. It appears that the groundwater on the western half of the Site flows towards the west and the north and groundwater on the eastern portion of the Site flows east and southeast.

What happened at the Former Burns & McBride Site?

The Site historically operated as a gasoline station and a heating oil supplier. In 1984, approximately 13,677 gallons of No. 2 heating oil was spilled from an Aboveground Storage Tank (AST). Three Underground Storage Tanks (USTs) were removed form the site but several USTs still remain at the site. The ASTs were removed. The property to the south was historically maintained as several industrial operations including a carriage works facility and several leather/hairworks operations. Due to the spill and the past industrial/commercial uses of the property hazardous substances, such as metals and petroleum, have impacted the Site. In addition, the fill materials originally used to fill the low lying areas contributed to soil contamination.

The Site operated as a gasoline station, from approximately 1927 to the early 1940s, and a heating oil supplier, from the 1940s until 2005. The property immediately to the south was historically used as a carriage works facility and at least three leather/hairworks operations, Some of the waste materials from these operations were apparently placed on the Site Contaminants of concern (COC) typically associated with these types of businesses include metals, petroleum, and polycyclic aromatic hydrocarbons (PAHs).

In 1984, approximately 13,677 gallons of No. 2 heating oil was spilled due to the rupture of a pipe cap connected to the above ground storage tanks (ASTs). A total of 4,480 gallons were recovered. In April 1999, the three USTs were removed from the site and based on soil sampling results the site received a No Further Action (NFA) from DNREC-Tank Management Branch (TMB). In 2006 the site went through a decommissioning process that included cleaning and dismantling of the ASTS; asbestos abatement of the storage building; demolition of site buildings; removal of demolition debris; and placement of crushed concrete.

What is the environmental problem at the Former Burns & McBride Site?

Several environmental investigations at the site showed elevated concentrations of metals, PAHs, naphthalene and vinyl chloride in the soil. The contaminant concentrations in soil exceeded DNREC's unrestricted (residential) use criteria. Groundwater at the site showed elevated concentrations of arsenic, iron, chloroethane, benzene, dibenzofuran and carbazole. However, groundwater is not being used at the site. The loading calculations to evaluate whether the contaminated groundwater is impacting the adjacent Christina River indicated that the contaminants are not adversely impacting the river. The sediment samples showed elevated concentrations of various metals, toluene, PAHs and 4,4-DDT. The sample results were above the sediment criteria. Surface water samples, collected adjacent to the site and upstream and downstream of the Site, showed elevated concentrations of several metals. Monitoring during DNREC approved temporary use of the site, detected a petroleum sheen in one of the monitoring wells. This well is being monitored quarterly for the sheen.

Several environmental investigations were performed at the site starting with groundwater monitoring after the heating oil spill in 1984. In 1990 groundwater was monitored to evaluate whether the recovery of petroleum product from the subsurface has been completed. In June 1990 DNREC concluded that the oil spill remediation effort was complete. A Phase I Environmental Audit was performed in May 1990 concluded that three underground storage tanks (USTs) were located on the site and the tanks were out of service prior to Burns and McBride purchasing the property. A Phase II Investigation was conducted in October 1992 to assess the site's soil quality. Soil sample results showed detects of benzene, toluene, ethylbenzene, xylenes (BTEX) and total petroleum hydrocarbons (TPH). In April 1999, the three USTs were removed from the site and based on soil sampling results the site received a No Further Action (NFA) from DNREC-Tank Management Branch (TMB). A Phase I Site Assessment was performed in May 2004. The report stated that two ASTs were removed in 2003. The report also identified several other ASTs located on the property. A Remedial Investigation (RI) was performed in 2005 as part of the Brownfields program and the report was issued in December 2007.
In site soil several metals; including but not limited to arsenic, lead, copper; vinyl chloride,

petroleum hydrocarbons, naphthalene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene and indeno(1,2,3-cd)pyrene were found. These contaminants exceeded DNREC's Unrestricted Use (residential) Uniform Risk Based Standards (URS).

Arsenic, iron, manganese, chloroethane, benzene, dibenzofuran and carbazole were found in groundwater samples above the URS. However, none of the groundwater contaminants of concern were detected above the URS in surface water. The mass loading screening calculations indicated that the groundwater discharge to the Christina River surface water does not pose a potential risk to human health or aquatic life.

Sediment samples showed several metals, toluene, 4,4-DDT, benzo(a)pyrene, benzo(a)anthracene, chrysene and fluoranthene exceeding the URS values. Several separate sediment assessments, including a preliminary ecological assessment and comparison of Hazard Quotients to Washington State Sediment Quality Standards (DNREC uses these standards on an interim basis), were performed to determine if the site is having a noticeable impact on the sediment of the Christina River and the sediment assessments showed that the site is not having a noticeable impact.

In August 2007, a small amount of petroleum product was observed in well GW3 during quarterly O&M inspections for the temporary site use, which will continue until the final remedy is implemented. Presence of the product is likely attributed to the existing USTs and/or the heating oil spill and will be addressed by future remedial actions outlined in this Plan.

A human health risk assessment showed that exposure to surface and subsurface site soil may pose an unacceptable carcinogenic and non-carcinogenic risk under an unrestricted use (residential) scenario. A vapor intrusion risk assessment was performed and showed that two specific areas exceeded the target carcinogenic risk for vinyl chloride and the hazard quotient for naphthalene. These areas will be addressed during the site redevelopment. Surface and subsurface soil analytical data was used to evaluate the risk to future construction workers performing intrusive activities at the Burns & McBride Site under current site conditions (prior to remediation). Both the cumulative carcinogenic and cumulative non-carcinogenic risk for the site exceeded DNREC guidelines, primarily due to risk associated with arsenic in soil.

Routinely ingesting shallow groundwater at the Site may pose both unacceptable carcinogenic and non-carcinogenic risks. However, groundwater at the site is not being used for drinking water or any other use

What does the owner want to do at the Former Burns and McBride Site?

The owner, BPG has not finalized a development plan but potential future uses include urban mixed use residential, and/or commercial development. Because a development plan has not been finalized, a remediation plan will be developed that will meet unrestricted use (residential) criteria, which requires the most protective level of environmental cleanup. If development plans change to commercial use only, and if the remedy is changed accordingly, then this will require amendment and re-notification of the final plan.

What clean-up actions have been taken at the former Burns and McBride Site?

In January 2006, BPG began decommissioning the site in order to utilize it as a temporary parking lot until redevelopment plans are finalized. This included cleaning and dismantlement of three above ground storage tanks (ASTs), asbestos abatement of one of the buildings, demolition of all site buildings and placement of crushed concrete (Figure 2). An Operations & Maintenance Plan for Temporary Use of the site as a parking lot was approved by DNREC in February 2006 and quarterly O&M inspections have been ongoing to ensure that the crushed concrete site cover is preventing contact with surface soil and to verify the integrity of the monitoring wells.

The petroleum product related to the heating oil spill in 1984 has been recovered and completed in June 1990.

What additional clean-up actions are needed at the former Burns and McBride Site?

DNREC's Proposed Plan includes removal of contaminated soil from hot spots; underground storage tank removals; capping the site; implementation of an environmental oversight program during redevelopment; installation of a vapor barrier, if necessary after post-remediation evaluation; prohibition of any land disturbance on the property, prohibition of groundwater usage at the site; and compliance with a DNREC-approved Operations and Maintenance Plan.

DNREC recommends the following remedial actions:

1) Removal of arsenic, lead and petroleum contaminated soil from hotspots areas as approved by DNREC during the remedial action;

2) Removal of underground storage tanks and associated petroleum impacted soil;

3) Placement of a 2 foot thick soil cap of DNREC approved soil or equivalent as determined by DNREC;

4) Implementation of an environmental oversight program, including an approved Contaminated Materials Management Plan, during redevelopment to protect workers and properly dispose of excavated soil and recovered groundwater;

5) Design and installation of a Vapor Barrier beneath occupied buildings, if necessary after post-remediation evaluation and sampling of soil and groundwater;

6) Placement of an Environmental Covenant (EC), consistent with the Uniform Environmental Covenants Act (UECA), that will require DNREC notification prior to any soil disturbance and restrict the use of groundwater through the existing City of Wilmington Groundwater Management Zone (GMZ);

7) Compliance with a DNREC-approved Operations and Maintenance (O&M) Plan within 90 days of the final redevelopment, including if deemed necessary, groundwater monitoring.

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

The developer has not finalized a development plan but potential future uses include urban mixed use residential, and/or commercial development. If development plans change to commercial use only, the final plan may be modified to meet restricted (commercial) use criteria, which will require an amendment of the final plan and notification. The O&M plan will ensure that the remedial measures that will be taken at the site remain protective of the human health and the environment. The current and the future owners of the property, as well as any future sub-parcels, will be responsible for the implementation of the all the requirements in the environmental covenant including O&M and monitoring requirements and will pay for DNREC's oversight for these activities.

DNREC plans to issue a Certificate of Completion of Remedy for the site after the completion of the proposed remedial actions at the site.

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

The complete file on the site, including the Brownfield Remedial Investigation, is available at the DNREC office, 391 Lukens Drive in New Castle. Most documents are also found on:

http://www.dnrec.state.de.us/dnrec2000/Divisions/AWM/sirb/

The 20-day public comment period begins on July 23, 2008 and ends at close of business (4:30 pm) on August 11, 2008. Please send written comments to the DNREC office or call Morgan Price, Project Manager, at: 302-395-2600.

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Glossary of Terms
Used in this Proposed Plan

Brownfield	Property that is vacant or underutilized because of the perception or presence of an environmental problem.
Contaminant of Concern (COC)	These are potentially harmful substances at concentrations above acceptable levels (eg metals and PAH).
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.
Final Plan of Remedial Action	DNREC's proposal for cleaning up a hazardous site after it has been reviewed by the public and finalized.
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.
Human Health Risk Assessment (HHRA)	An assessment done to characterize the potential human health risk associated with exposure* to site related chemicals.
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.
Site Specific Assessment (SSA) and Site Inspection (SI)	Environmental studies of a site including sampling of soils, groundwater, surface water, sediment and/or wastes on the property.

What is a *Proposed Plan?*

A Proposed Plan of Remedial Action (Proposed Plan) is a summary of how DNREC plans to clean up a contaminated site. A Final Plan of Remedial Action (Final Plan) is the adoption of the Proposed Plan, after all comments made by the public within the comment period of twenty days have been considered and addressed by DNREC.

The Delaware State Legislature passed the Hazardous Substance Cleanup Act (HSCA) in 1990. The Legislature made sure that members of the public would be informed about environmental problems in their own neighborhoods and have a chance to express their opinion concerning the clean up of those environmental problems before DNREC takes action.

After DNREC studies a site, it summarizes the problems there and proposes one or more possible solutions in a Proposed Plan. The Proposed Plan contains enough information to allow lay persons to understand the site. More detailed information can be found in the reports and documents approved by DNREC. All of the documents and reports created by DNREC or consultants during the course of the investigation of the site are available to the public at the offices of DNREC-SIRB or at DNREC's website:

http://www.dnrec.state.de.us/dnrec2000/Divisions/AWM/sirb/sitefiles.asp .

DNREC issues the Proposed Plan by advertising it in at least one newspaper in the county where the site is located. The legal notices for the Proposed Plans and the Final Plans usually run on Wednesdays or Sundays in the legal classified section of the News Journal and/or the Delaware State News. The public comment period begins on the day (Wednesday), or the day after (Sunday) the newspaper publishes the legal notice for the Proposed Plan.

DNREC frequently holds public meetings during the comment period. Those meetings are usually held near the site in the evening. Citizens can request a public meeting if DNREC did not already schedule one.

Comments are collected at the public meetings, by phone or in writing. DNREC considers all comments and questions from the public before the Proposed Plan is finalized and adopted as a Final Plan.