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November 6, 2019

Stephen Maybury, Chief
Bureau of Case Management
NJ Department of Environmental Protection
Mail Code 401-05F
PO Box 420
Trenton, NJ 08625-0420

Re: Rolling Knolls Landfill Superfund Site

Dear Mr. Maybury:

This office serves as counsel to the Rolling Knolls Landfill Group, comprised of Nokia of America Corporation (f/k/a Alcatel-Lucent USA Inc.), Chevron Environmental Management Company for itself and on behalf of Kewanee Industries, Inc., and Novartis Pharmaceuticals Corporation (the “Group”). We are submitting this letter in response to a September 9, 2019 letter from the United States Department of Interior (“DOI”) to the New Jersey Department of Environmental Protection (“NJDEP”) regarding the remedial alternatives that the United States Environmental Protection Agency (“EPA”) is currently considering for the Rolling Knolls Landfill Superfund Site (the “Site”).

In its September 9th letter, DOI claims the draft Feasibility Study (“draft FS”) does not establish remediation goals that will be protective of human health. This is simply incorrect. As discussed in the Group’s May 16, 2018 response to the February 16, 2018 Comments of the United States Fish and Wildlife Service (“FWS”) on the draft Feasibility Study Report that the Group submitted to the EPA in December of 2017, the proposed remedial alternatives in the draft FS are protective of human receptors. (A copy of this response is attached as Exhibit A.)

DOI’s characterization of the Refuge wilderness area as “open to the public for recreational use” is not an accurate representation of the human use of the area. The Baseline Human Health Risk Assessment, which was prepared by the EPA’s contractor, and on which FWS was given the opportunity to comment, found that there were no complete human exposure pathways within the portion of the Site located on the Great Swamp National Wildlife Refuge (the “Overlap Area”). *See* EPA, Baseline Human Health Risk Assessment, Rolling Knolls Landfill Superfund Site, Chatham, NJ at 4-3 (CDM 2014) (“BHHRA”). The EPA affirmed that conclusion again in July of 2018. The BHHRA found that the Overlap Area is “predominantly forested wetland composed of well-developed tree, shrub and herbaceous vegetation strata.” *Id.* Given the density of the vegetation and presence of standing water, “human receptors are not

anticipated to occupy these areas.” *Id.* Even though a network of un-maintained trails is located approximately one mile to the east of the Overlap Area, “the unstable footing of the terrain coupled with the dense understory make traversing areas off these trails by foot difficult.” *Id.* Unlike designated recreational areas that presently exist at the Site such as the ball fields and shooting range, the BHHRA concluded that it was “unlikely that recreators... [will] walk through the wilderness area adjacent to the eastern landfill boundary ...” *Id.* Thus, although it is possible that the rare trespasser may access the Overlap Area, the waste material, if left in place, poses no unacceptable risk to human health. *Id.* As such, all of the proposed alternatives in the draft FS are protective of human receptors. *Id.*

This finding is fully consistent with the 1975 FWS letter attached hereto as Exhibit B, in which FWS acknowledged that the only access to the Overlap Area was through the portion of the Site owned by the Mieles. In addition, FWS recognized and explicitly stated at that time that it never intended that the Overlap Area be used for recreation, but rather, that it was “acquired by the government as a buffer.” This explains in part why FWS rejected a demand from Chatham Township in 1975 to properly close the landfill on the Overlap Area and why FWS has undertaken absolutely no efforts to improve the Overlap Area during its 50 years of ownership.

It is also consistent with the position FWS has taken with respect to the OU3 Asbestos Dump Superfund Site (“OU3”), located elsewhere in the Refuge. In its June 2014 Five Year Review for that site, FWS stated that passive recreation in the area “is extremely limited due to the difficulties in accessing the site via the Refuge’s hiking trail complex,” and that it had eliminated parking in the vicinity of the site “thereby closing the area to the public for all practical purposes.” Accordingly, the BHHRA’s conclusion that no one other than the very rare trespasser would gain access to the Overlap Area is eminently reasonable and consistent with the FWS’s prior assessment of its own site. It is, similarly, consistent with the process by which the NJDEP evaluated and ultimately approved alternate remediation standards for certain contaminants at the Site.

DOI also states in its September 9th letter that the draft FS does not establish remediation goals that will be protective of ecological receptors and that the data used in the Baseline Ecological Risk Assessment (“BERA”) is limited. We note at the outset that the Site has undergone a rigorous ecological evaluation that included a Screening Level Ecological Risk Assessment, the BERA and a Residual Ecological Risk Assessment (“rERA”). The BERA included extensive biological sampling of invertebrates, small mammals, forage fish and aquatic vegetation, toxicity testing of sediments and confirmatory surface water sampling. The rERA, which is Appendix C to the draft FS, evaluated the impact on ecological receptors of FS Soil Alternatives 3, 4, and 5. The rERA concluded that each of these alternatives would reduce post-remedy ecological risks to a level unlikely to result in ecological impacts, especially in light of the conservative assumptions used to calculate the exposures. Bolstering this conclusion, the Ecological Habitat Survey found that even in its current, unremediated state, the Site supports a varied ecological community, typical of these types of habitats in New Jersey. Accordingly, the

remedial alternatives presented in the FS Report will reduce the risk to wildlife on the Refuge to an acceptable level.

The September 9th letter also claims that failure to “properly close” the landfill will result in continued migration of contaminants to the wilderness area of the Great Swamp National Wildlife Refuge. However, data collected to date shows only low levels of groundwater, surface water, and sediment contamination on the Refuge, none of which presents unacceptable human health or ecological risks. The DOI’s own report, the Rolling Knolls Landfill Superfund Site Feasibility Study Assessment dated April 2019 (“DOI FS Critique”) merely speculates that the “contaminated groundwater plume from the Site can be expected to discharge into surface waters on the Refuge at some point.” (See, DOI FS Critique at p. 3.) However, given that the Site stopped accepting waste over 50 years ago, future migration of groundwater contaminants into the surface water at the Refuge is highly unlikely and would have little or no impact if it occurred.

DOI further claims that the New Jersey’s legacy landfill regulations promulgated in 2017 are applicable, or at least relevant and appropriate requirements that any remedial alternative developed for the Site must achieve. As discussed in greater detail in the White Paper attached hereto as Exhibit C, a copy of which was provided to the NJDEP on November 13, 2018, the New Jersey legacy landfill regulations promulgated in 2017 are not applicable to the Site.

The DOI letter also recommends that the use of on-site material be fully evaluated in the FS proposed alternatives because on-site materials were successfully used to construct the landfill cap at OU3. However, there is currently insufficient information to determine whether the use of on-site material for the cap (assuming a cap is part of the selected remedy) is feasible at the Site. That on-site material was successfully used to construct the landfill cap at OU3 does not guarantee that on-site material can also be used at this Site. A number of site-specific factors will go into this determination, including the depth, moisture content and structural suitability of the material. Also, there is at least one significant difference between OU3 and the Site – size. OU3 consists of approximately 7 acres, while the Site is approximately 140 acres. There is simply no evidence that the approach used at OU3 could be scaled up to a 140 acre site. Moreover, a 140 acre clay cap could have significant impacts on area drainage patterns and runs the risk of creating or exacerbating flooding and drainage issues in nearby residential areas. If a cap is part of the selected remedy, then the Pre-Design Investigation (“PDI”), not the FS, is the appropriate vehicle for evaluating the use of on-site materials, to the extent practicable and consistent with engineering best practices.

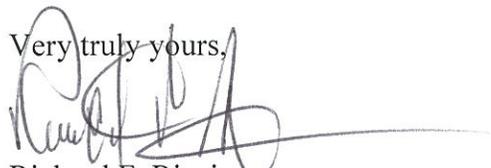
DOI further claims, first, that any remedial alternatives for the Site that do not remediate soil to New Jersey residential direct contact soil standards would not comply with New Jersey’s soil remediation regulations, unless a deed notice is placed on the property and, second, that DOI cannot place any use restrictions on the Overlap Area. For the reasons set forth in the White Paper attached as Exhibit D, a copy of which was provided to the Department on February 22,

2019, a deed notice is not required on the Refuge even if contamination exists above residential standards.

Finally, DOI claims in its September 9th letter that it has been delegated enforcement authority under CERCLA. However, this misrepresents the mandated relationship between EPA and FWS at so-called mixed ownership sites or sites under management of FWS. While Executive Order 12580 does generally delegate the President's CERCLA response action authority to various agencies, including the DOI, where a release or threat of release is on or from a facility/site under the jurisdiction, custody, or control of such agency, there are exceptions. Exec. Order No. 12580, 3 CFR 193 (1987). One such exception is for sites on the National Priorities List. *Id* at §2(e)(1). As the Rolling Knolls Landfill is on the National Priorities List, this Executive Order does not delegate to DOI (or FWS) response action authority for the Site.

The Statement of Principles for Collaborative Decision Making at Mixed Ownership Sites does not alter or expand the rights and obligations delegated to an agency by Executive Order 12580. *See* Statement of Principles for Collaborative Decision Making at Mixed Ownership Sites, OSWER Directive 9200.06-1. Rather, where the respective agencies disagree as to the appropriate response action for a site, the responsibility for the response action ultimately lies with EPA.

We appreciate the opportunity to submit these comments. Please do not hesitate to contact me if you need any additional information.

Very truly yours,

Richard F. Ricci

RFR:wlg

Enclosures

cc (w/enc): Lois Godfrey Wye, Esq.
Kimberly Childe, Esq. (by email)
Melissa Papasavvas, Esq. (by email)
Ms. Angela Carpenter (by email)
Juan Fajardo, Esq. (by email)
Rolling Knolls Site Group (by email)
Mr. Michael Faigen (by email)

EXHIBIT

A



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May 16, 2018

By Email and Regular US Mail

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Ms. Betsy Donovan
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Re: Rolling Knolls Landfill Superfund Site

Dear Mr. Fajardo and Ms. Donovan:

This office serves as counsel to the Rolling Knolls Landfill Group, comprised of Nokia of America Corporation (f/k/a Alcatel-Lucent USA Inc.), Chevron Environmental Management Company for itself and on behalf of Kewanee Industries, Inc., and Novartis Pharmaceuticals Corporation (the "Group.") In accordance with your instructions, we are providing with this letter the Group's response to the February 6, 2018 Comments of the United States Fish and Wildlife Service ("USFWS") on the Draft Feasibility Study Report that the Group submitted to the United States Environmental Protection Agency ("EPA") in December of 2017.

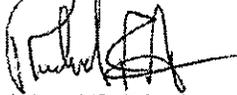
In preparing this response to comments, the Group has not addressed communications between the EPA and the USFWS during the remedial investigation/feasibility study process. Similarly, the Group has not addressed the applicability (if any) or application of processes or policies for collaboration between EPA and USFWS at so-called mixed ownership sites or sites under management of the USFWS. Beyond that, however the Group has attempted to respond to each and every issue that USFWS has raised in its comments and in its cover letter forwarding those comments to the EPA.

Juan M. Fajardo, Esq.
Ms. Betsy Donovan
Page 2

May 16, 2018

We are, of course, available if you have any questions regarding these materials.

Very truly yours,



Richard F. Ricci

RFR:wlg

Enclosure

cc: (by e-mail) Melissa Papasavvas, Esq. (w/ enclosure)
Rolling Knolls Site Group (w/ enclosure)
Mr. Michael Faigen (w/ enclosure)
John Persico, P.G. (w/ enclosure)
Mr. George Molnar (w/ enclosure)

GENERAL COMMENTS

1. *The United State Fish and Wildlife Service (Service or FWS) has on multiple occasions over the past three years, met with representatives of the United States Environmental Protection Agency (EPA) and the Site PRP Group (collectively, the Parties) and advocated for the complete removal of contaminated soil and waste material from the portion of the Site located on the Great Swamp National Wildlife Refuge (Refuge or GSNWR). The Refuge is owned by the United States and managed by FWS and includes a designated National Wilderness Area. However, none of the alternatives proposed in the Draft Feasibility Study (FS) prepared by the PRP Group and submitted to EPA in December 2017, remotely acknowledge any of the approaches discussed between the Parties. Alternative 5 proposes remediation of the Refuge portion of the Site with a cap; however, this is not a remedy that FWS supports. The FWS will continue to advocate for a remedy that includes removal of all waste material from the Refuge portion of the Site followed by restoration of the remedial footprint, which would be the most appropriate and protective remedy for both ecological receptors and future recreational users utilizing the portion of the Site on GSNWR. The FWS reiterates its willingness to cooperate in both a technical and administrative manner to ensure that remedial activities within the area go as unimpeded as possible.*

Response:

From the perspective of the Rolling Knolls Site Group¹ (the "Group"), the purpose of the discussions between the Group and the United States Fish and Wildlife Service ("USFWS") over the past three years has been to explore the possibility of a settlement of any Natural Resource Damage ("NRD") claims USFWS may assert related to the Rolling Knolls Landfill Superfund Site ("Site"), as well as to keep USFWS, which is also a potentially responsible party, informed. It was in that context that the Group discussed with USFWS the complete removal of contaminated soil and refuse or waste material from the portion of the Site located on the Great Swamp National Wildlife Refuge ("Refuge" or "GSNWR"). (This remedy is hereinafter referred to as "Complete Removal.") As explained more fully below, and as the Group has discussed with USFWS, the remedy selection criteria promulgated under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. 9601 *et seq.*, do not require Complete Removal. CERCLA requires remedial action only for the release or threatened release of (1) hazardous substances or (2) pollutants or contaminants that present an imminent and substantial endangerment to public health and welfare. CERCLA does not require remedial action based on the mere presence of refuse or solid waste at a site. *Id.* at 9604(a)(1). Accordingly, the Group never committed to include Complete Removal in the Feasibility Study ("FS").

The Group cannot comment on meetings or discussions between USFWS and the United States Environmental Protection Agency ("EPA").

2. *The Draft FS opines that the implementability of Alternatives 3, 4 and 5 would be considerably reduced due to excessive truck traffic from hauling in material and increases in costs and emissions associated with such activities, and the destruction of on-Site habitats. Again, the FWS, Group, and EPA, have discussed on several occasions the use of on-Site material for a landfill cap. It is well-documented that the underlying clay unit at the Site is far in excess of 25 feet thick. Use of on-Site material would eliminate most, if not all of the concerns related to hauling in material from off-Site sources, potentially resulting in a significant cost savings. The construction of landfill caps utilizing what is expected to be the same geologic unit that underlies the same geologic unit that underlies the area has been used and successfully implemented at Operable Unit 3 of the Asbestos Dump Superfund Site and Harding Landfill site located a short distance away at the GSNWR. FWS provided these same comments in April 2017*

¹ The Group consists of Chevron Environmental Management Company, for itself and on behalf of Kewanee Industries, Inc., Nokia of America Corporation (formerly known as Alcatel-Lucent, Inc. as successor to Lucent Technologies Inc., as successor to Western Electric, Inc.), and Novartis Pharmaceuticals Corporation, as successor to Ciba-Geigy Corporation.

in response to the PRP Groups similar claims in the Draft Development and Screening of Remedial Alternative (DSRA) Technical Memorandum.

In addition, the text portrays on-Site habitats as if they consist of a native, intact plant community of exceptional habitat value. This couldn't be further from the truth. The Site is dominated by a plant community comprised primarily of invasive, ruderal species providing limited habitat value. There are also several locations on the landfill where surficial refuse is found alone or intermixed with vegetation. Any suggestions that the destruction of these habitats during remedial activities would be damaging is simply incorrect. Moreover, FWS is the entity that is responsible for making determinations of appropriateness and compatibility of actions to be taken on National Wildlife Refuges, not EPA or private parties.

Furthermore, the text implies that restoration of areas undergoing remediation with grasses would not be reflective of the naturally-occurring habitat. Again, the PRP Group is not empowered to make such determinations. FWS, utilizing its Comprehensive Conservation Plan (CCP), determines the strategic management direction for the Refuge that best achieves the Refuge's purposes, including future uses, contributions to the National Wildlife System mission, and management actions needed to achieve desired conditions at GSNWR. While landfill operations (e.g., the placement of refuse and swamp muck cover) may have created conditions suitable for the colonization of upland invasive vegetative species which dominate the landscape today, revegetation with native forbs and/or grasses would greatly improve the Site in terms of habitat value and wildlife usage. This is important to note, as the Site is bounded by environmentally sensitive habitats and is potentially host to, or is utilized by Federally-listed species as noted in the Draft FS.

Response:

Initially, we do not understand this comment because USFWS stated in its first comment that it does not support a remedy that includes a cap. There is currently insufficient information to determine whether the use of on-site material for the cap (assuming a cap is part of the selected remedy) is feasible at the Site. That on-site material was successfully used to construct the landfill cap at Operable Unit 3 of the Asbestos Dump Superfund Site and Harding Landfill Site located on the Refuge does not guarantee that on-site material can also be used at this Site. A number of site-specific factors will go into this determination, including the depth, clay content, moisture content and structural suitability of the material. For example, a significant portion of the on-site material that USFWS proposes to be used in cap construction is located below the water table; accordingly, dewatering and geotechnical parameters need to be evaluated to determine the suitability of these materials for cap construction. If a cap is part of the selected remedy, then the Pre-Design Investigation (PDI) is the appropriate vehicle for this evaluation, to the extent practicable and consistent within engineering best practices. Because the suitability of the on-site material at Rolling Knolls for cap construction has not yet been verified, the FS will continue to estimate the cost for cap construction on sourcing material from off-site.

With respect to the USFWS characterization of the Site's habitat, although portions of the Site upland areas are heavily disturbed (e.g., thin soil layer, landfill material at the surface), there are well vegetated upland terrestrial areas and wetland areas bordering the main landfill (and proximal to the Refuge) that are currently supporting average and higher value habitats. See Baseline Ecological Risk Assessment (Integral Consulting 2016) ("BERA"), Appendix D – Ecological Habitat Assessment at Table D4-1. Indeed, USFWS acknowledges that the Site "is potentially host to, or is utilized by Federally-listed species." See Specific Comment 21. The vegetative cover in the upland terrestrial areas is similar to "old field" mixtures of plant species. Species common to mixed forest and shrub habitats of New Jersey were observed (or evidence of their presence, such as scat) during the field investigation. Terrestrial species observed or heard include a variety of passerines, raptors, small (e.g., chipmunk, squirrel) and medium size (e.g., red fox and groundhogs) mammals. Tracks and scat throughout the site suggest abundant raccoon, deer, and evidence of black bear activity. Large and small burrow holes were observed

In the upland vegetated areas and near the edges of the wetlands throughout the course of the field investigation.

The wetland and aquatic habitats are predominantly present on the perimeter of the landfill. Aquatic and semi-aquatic wildlife were observed during the 2016 ecological site assessment and BERA field sampling event. A wide variety of frog species and salamanders utilize the wetland and pond environments at the Site. An adult of the New Jersey endangered blue-spotted salamander was observed to the west side of one of the west Site ponds. Overall, suitable habitat exists for amphibians, turtles and avian species at wetland habitats located on the western, southern, and northeastern landfill perimeter.

The Ecological Habitat Assessment indicates that the site is supporting a varied ecological community typical of these types of habitats in New Jersey.

The text of the FS will be revised to indicate that capped and excavated/backfilled areas will be revegetated with species native to New Jersey. To the extent practicable and consistent with engineering best practices, revegetation on the Refuge, if any is required, will align with the U.S. Fish & Wildlife Service, Great Swamp National Wildlife Refuge, Comprehensive Conservation Plan, (November 2014) ("CCP") and will be conducted in consultation with USFWS.

3. *The proposed alternatives do not comply with all of the Applicable or Relevant and Appropriate Requirements (ARARs) provided by FWS in August 2016 and presented in Table 4-1. Most notably, the Wilderness Act of 1964 and Great Swamp Wilderness Act of 1968. These laws were enacted to preserve the "wilderness character" of the specific portions of the Refuge for the "use and enjoyment of the American people in a way that will leave those areas unimpaired to future use and enjoyment as Wilderness." None of the alternatives proposed in the Draft FS include full removal of contaminated materials from the Refuge, so as to leave this portion "unimpaired to future use and enjoyment," and therefore, none of the currently drafted alternatives comply with these important ARARs for the Refuge portion of the Site.*

Response:

Applicable or Relevant and Appropriate Requirements ("ARARs"), including the Wilderness Act of 1964 and the Great Swamp Wilderness Act of 1968, do not require and are arguably inconsistent with Complete Removal. The Group will address these statutes in turn.

Wilderness Act of 1964

While USFWS is correct in stating that the Wilderness Act was enacted to "preserve the 'wilderness character,'" the comment incorrectly implies that "wilderness character" is something which must be preserved so that the wilderness area is "unimpaired for future use and enjoyment as wilderness." Rather, the preservation of wilderness character and providing for the public use and enjoyment of the wilderness are separate, often contradictory, purposes of the statute. See 16 U.S.C. § 1133(b) ("[E]ach agency administering any [wilderness] area . . . shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its wilderness character." But "wilderness areas shall [also] be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use"). Reviewing courts have recognized that the Wilderness Act "gives conflicting policy directives" to the administering agency. *Wilderness Watch, Inc. v. U.S.F.W.S.*, 629 F.3d 1024, 1039–40 (9th Cir. 2010). Accordingly, the two issues will be addressed separately.

Preserving Wilderness Character

While the Wilderness Act calls for the "preservation of wilderness character," the Act does not define "preservation" or "wilderness character." The USFWS *General Overview of Wilderness Stewardship Policy* attempts to define the concept. See *General Overview of Wilderness Stewardship Policy*, 610 FW 1, 1.1.B (Nov. 7, 2008). The Wilderness Policy provides that

"[p]reserving wilderness character requires that we maintain both the tangible and intangible aspects of wilderness." *Id.* 1.13.A. The Wilderness Policy also states that:

Maintaining wilderness character requires an attitude of humility and *restraint*. In wilderness, we do not adjust nature to suit people, but *adjust human use and influences so as not to alter natural processes*. We strengthen wilderness character with every decision to *forego actions that have physical impact* or would detract from the idea of wilderness as a place set apart, a place where human uses, convenience, and expediency do not dominate."

Id. 1.13.D (emphasis added). The USFWS comments seem to advocate for removal of all waste materials from the Refuge, yet USFWS's own interpretation of "wilderness character" supports leaving such materials in place in order to exercise "restraint" and "forego actions that have a physical impact" on the Refuge. Soil Alternatives 3 and 4 in the FS demonstrate such restraint by limiting remediation in the Refuge to the one APC (as defined in the FS) identified there. Similarly, USFWS's concern would also militate against any effort to encourage public access to this area by making it accessible to recreational users.

Additionally, the Wilderness Policy explains that the benchmark for assessing the significance of a proposed action's beneficial and adverse impacts on wilderness character is the condition prevailing in the area at the time of wilderness designation. See 610 FW 1, 1.18.C. This Non-degradation Principle "specifies that, at the time of wilderness designation, the conditions prevailing in an area establish a benchmark of that area's wilderness character and values. [USFWS] will not allow the wilderness character and values of the wilderness to be degraded below that benchmark." *Id.* 1.3.Q. The portion of the landfill on the Refuge (the "Overlap Area") was in place in 1968, when the Refuge was designated as a Wilderness Area. Thus, the conditions of the Overlap Area at that time, including the presence of waste materials and hazardous substances, establish the benchmark wilderness character that should be preserved. Indeed, given that landfill operations on the Overlap Area ceased 1968, that area is undoubtedly in far better condition now, given the passage of time and the operation of natural processes, than it was as of the 1968 benchmark.

USFWS effectively endorsed this conclusion in 1975. In January of 1975, Chatham Township sent a letter to USFWS requesting that it properly cover and close the Overlap Area in accordance with requirements in place at the time. See Letter from the Town of Chatham to Mr. Richard E. Griffith, Regional Director, Fish and Wildlife Service (January 14, 1975) (the "1975 Chatham Letter"). By letter dated May 16, 1975, USFWS acknowledged that the Overlap Area contained landfilled materials and that it had not been properly closed. Although expressing concern about "the lateral leaching of pollutants" into the Wilderness Area, USFWS nevertheless did nothing, stating that it was their "contention and commitment that nature should now be allowed to take its course." Letter from Fish and Wildlife Service to Frank Kling, President, Board of Health, Township of Chatham at p. 2 (May 16, 1975) (the "1975 USFWS Letter"). (The 1975 Chatham Letter and the 1975 USFWS Letter are attached to this response to comments as Exhibit A.)

USFWS contends that full removal of the waste is required to preserve "wilderness character," yet its decisions at least one other Superfund site in the Wilderness Area belies this contention. Operable Unit 3 of the Asbestos Dump Superfund Site ("OU3") is located in the Wilderness Area; nevertheless the USFWS issued a Record of Decision for OU3 that allowed for over 1,200 tons of non-hazardous lead-contaminated soils and tons of asbestos contaminated materials ("ACM") to remain onsite. See Record of Decision for Operable Unit 3 of Asbestos Dump Superfund Site at p. 33 (September 1998) ("OU3 ROD"); Five-Year Review for Operable Unit 3 of the Asbestos Dump Superfund Site at p. 9 (June 2014.) Given that at least some waste and contamination was left in place at OU3 and this remedy was considered "consistent with location specific ARARs," including the Wilderness Act, it follows that complete removal of waste materials is not required for compliance with the Wilderness Act. *Id.* at p.30. Interestingly, one of the remedial alternatives

the USFWS considered and rejected in the OU3 ROD was excavation and off-site disposal of the ACM. *Id.* at p. 28.

Unimpaired for Future Use and Enjoyment

The term "unimpaired," is used in Section 1131(a) of the Wilderness Act but is not defined in the Act or USFWS guidance. However, the USFWS claim that the remedy for the Overlap Area should leave it "unimpaired for future use" is inconsistent with its own treatment of the Overlap Area over the years. When presented with the Chatham Township request in 1975 that it properly close the Overlap Area, USFWS declined, in part, because it apparently never intended for the Overlap Area to be used for recreation, but rather, that it was "acquired by the government as a buffer." Indeed, USFWS has owned the Overlap Area for almost 50 years (including for 35 years prior to its placement on the National Priorities List ("NPL")) and yet has done nothing to address its impairment or improve its suitability for use and enjoyment. Moreover, USFWS effectively acknowledged that leaving contaminated material in place does not act as an impairment of future use and enjoyment by not requiring complete removal of waste and contaminated materials in the OU3 ROD.

Compliance with the Great Swamp Wilderness Act of 1968

The Great Swamp Wilderness Act of 1968 designated approximately 3,700 acres of the Great Swamp as Wilderness Area pursuant to the Wilderness Act ("Wilderness Area") and established that the Bureau of Sport Fisheries and Wildlife (later renamed USFWS) is responsible for administering the area. 82 Stat. 883 (Sept. 28, 1968). The remaining section of the Great Swamp Wilderness Act expressly prohibits within the Wilderness Area commercial enterprise, temporary roads, the use of motor vehicles, motorized equipment or motorboats, the landing of aircraft, the use of any mechanical transport, and structures or installations "[e]xcept as *necessary* to meet *minimum requirements* in connection with the purpose for which the area is administered (including measures required in emergencies involving the health and safety of persons within the area)." *Id.* (emphasis added). This language mirrors the language used in the prohibitions in the Wilderness Act. See 16 U.S.C. § 1133(c).

The removal of waste from the Wilderness Area would require motorized equipment and transport, disturbance, removal, and destruction of any plants that have grown over the waste, a temporary road to allow for disposal of the waste outside the Great Swamp, landfilling to replace the removed materials, and replanting. Except for the replanting, each of these activities is prohibited by the Great Swamp Wilderness Act, and none of these activities is expressly authorized in the Act. Accordingly, the Great Swamp Wilderness Act does not compel removal of waste and contaminated materials given the extensive prohibited activities that work would require, but rather, establishes that the Wilderness Area should be left alone, as USFWS advocated in 1975, or, at the very least, that remediation work there should be minimized.

4. *The Draft FS fails to include passive recreationalists utilizing the Wilderness Areas as potential receptors. Thus, the remedy selected for the portion of the Site on FWS-managed land should be protective of these and ecological receptors.*

Response:

The Draft FS does not include passive recreationalists utilizing the Wilderness Area as potential receptors because the Baseline Human Health Risk Assessment, which was prepared by the EPA's contractor, and on which USFWS was given the opportunity to comment, found that there were no complete human exposure pathways within the Overlap Area. See USEPA, Baseline Human Health Risk Assessment, Rolling Knolls Landfill Superfund Site, Chatham, NJ at 4-3 (CDM 2014) ("BHHRA"). That document found that the Overlap Area is "predominantly forested wetland composed of well-developed tree, shrub and herbaceous vegetation strata." *Id.* Given the density of the vegetation and presence of standing water, "human receptors are not anticipated to occupy these areas." *Id.* Even though a network of un-maintained trails is located approximately one mile to the east of the Overlap Area, "the unstable footing of the terrain coupled with the dense understory make traversing areas off these trails by foot difficult." *Id.* Accordingly, the

BHHRA concluded that it was "unlikely that recreators... [will] walk through the wilderness area adjacent to the eastern landfill boundary to reach the site." *Id.* While it is possible that the rare trespasser may access the Refuge portion of the Site, the waste material, if left in place, poses no unacceptable risk to human health. As such, all of the proposed alternatives are protective of human receptors. See *id.*

This finding is fully consistent with the 1975 USFWS Letter, in which USFWS observed that the only access to the Overlap Area was through the portion of the Site owned by the Mieles. In addition, again, USFWS acknowledged that USFWS never intended that the Overlap Area be used for recreation, but rather, that it was "acquired by the government as a buffer." This explains in part why USFWS rejected Chatham's demand that it properly close the landfill on the Overlap Area and why USFWS has undertaken no efforts to improve the Overlap Area during its 50 years of ownership. Accordingly, the BHHRA's conclusion that no one other than the very rare trespasser would gain access to the Overlap Area is imminently reasonable.

With respect to ecological receptors, the FS Report has been revised to include as Appendix C the Residual Ecological Risk Assessment Tech Memo ("rERA"), which evaluates the impact on ecological receptors of FS Soil Alternatives 3, 4 and 5. The rERA concludes that each of these alternatives will reduce post-remedy ecological risks to a level unlikely to result in ecological impacts, especially in light of the conservative assumptions used to calculate the exposures. Bolstering this conclusion, the Ecological Habitat Survey found that even in its current, unremediated state, the Site supports a varied ecological community, typical of these types of habitats in New Jersey.

5. *Throughout the Draft FS, results of the short-tailed shrew and American robin models are referenced and suggest calculated risks are specific and limited only to these receptors. This is misleading, as the models are used to represent specific assessment endpoints or feeding guilds, vermivorous birds and mammals. All text in the document should be revised to read that risks to vermivorous birds and mammals were noted based on short-tailed shrew and American robin models.*

Response:

Editorial changes will be made throughout the FS to reference vermivorous birds and mammals.

SPECIFIC COMMENTS

1. *Page 3, Section 2.2: Language with respect to the future use of the portion of the Site on GSNWR must be amended to be consistent with the Refuge's CCP, including acknowledgment of the Wilderness Area designation and the associated future recreational use.*

Response:

The language in Section 2.2 discussing the future use of the portion of the Site on the GSNWR is consistent with the CCP and accounts for all reasonable future uses as written. Section 1.5 of the CCP, which discusses the "Refuge Establishment, History, and Purpose," states:

Personal communication with refuge staff and review of available records support that all tracts of land were acquired under the primary purposes of the Great Swamp NWR. Any potential conflicts are researched and resolved by a FWS Solicitor prior to acquisition. *No existing land acquisition uses conflicting with the refuge's purposes were identified.*

CCP at 1-25 (emphasis added). The Overlap Area was a landfill at the time that USFWS acquired it. The 1975 USFWS Letter indicated that the Overlap Area was acquired not for recreational purposes but as a buffer between the Refuge and the remaining portion of the landfill on the Miele property. USFWS has owned the Overlap Area for almost 50 years (including 35 years prior to the Site's placement on the NPL.) Not only has it taken no action to improve this area, but it

overtly rejected Chatham Township's demand in 1975 that the Overlap Area be properly closed. As USFWS determined in the CCP that the land, as acquired, was consistent with the Refuge's purpose and has, itself, treated the Overlap Area accordingly, continuing to maintain the land in its current condition is, similarly, consistent with the Refuge's purpose and the CCP.

Thus, the statement in the FS that the Site (including the Overlap Area) will not be used for recreational purposes is correct.

2. *Pages 4-5, Section 2.4, second paragraph: The text primarily discusses the history of the portion of the Site situated on Refuge property and correspondence that allegedly occurred between Chatham Township and the United States regarding proper closure of the 30 acres on the Refuge. This section reads less like site history and more like an advocacy piece for future liability discussions. The text even makes the following quote "nature should now be allowed to take its course" taken presumably from some communication between DOI and Chatham. The only reference made for the above is the Site Characterization Summary Report (SCSR) (Arcadis 2012). However, review of the SCSR indicated none of the above information. If a proper reference cannot be cited or provided regarding communication between DOI and Chatham, history of waste disposal at the site, and the dispute over the handling of the landfill closure, then this text should be removed.*

Response:

The correspondence referenced in the second paragraph of Section 2.4 consists of the 1975 Chatham Letter and the 1975 USFWS Letter. A formal citation to the correspondence will be added to the FS. Additionally, a copy of the correspondence is included as Exhibit A to this response to comments.

3. *Page 10, Second paragraph, last sentence: The text states that there are no downgradient receptors for groundwater. This may be the case for humans; however, groundwater is relatively shallow and flows from the landfill in a radial fashion into adjacent wetlands and streams. Thus, there is potential for exposure to ecological receptors especially those present at the GSNWR. Revise both this and other text in the document as appropriate to include ecological receptors.*

Response:

The referenced paragraph will be removed from the FS Report per EPA's comments. No additional changes will be made.

4. *Page 12, Second paragraph: Please clarify what type of agreement (e.g., deed restriction) was negotiated between the Group and Miele Trust restricting the Site from future residential use.*

Response:

The Group is in the process of negotiating with the Trustee of the Trust under the Last Will and Testament of Angelo Miele ("Trust") a restrictive covenant that will prohibit any future residential, commercial or residential development of the portion of the Site that the Trust owns.

5. *Page 18, First paragraph, third sentence: Not all literature-based uptake factors overestimate risk as the text states. Revise the sentence to read "The use of literature-based uptake factors may under, or overestimate the potential exposure (and calculated risk) because they do not reflect Site-specific bioavailability, conditions, or actual prey items consumed." Revise the text accordingly both here, and elsewhere as appropriate.*

Response:

This language is from the EPA-approved BERA. In response to a similar comment made on the BERA, one of the main sources of uncertainty for field-collected prey items is representativeness (which was addressed by taking composite samples at the stations and using the average across the stations in evaluated areas as EPCs). In contrast, the estimated plant concentrations assumes 100% bioavailability from soils and use of literature values for uptake values, which

could potentially overestimate the tissue levels (since these values do not account for site-specific information, such as soil pH or total organic carbon content). Section 4.3.5.1 of the BERA showed that the estimated lead concentrations in the small mammals from terrestrial and wetland areas from ERAGS Step 3 (which were estimated from literature bioaccumulation models and assumed 100% bioavailability from the soils) were an order of magnitude greater than observed in the field-collected small mammals. Consequently, this indicates that there would be less relative uncertainty with the field-collected compared to estimated prey items in tissue concentrations (and risk calculations). Accordingly, it is more likely that risk is overestimated when COPEC concentration are estimated in prey or forage items. The Group responded uncertainties are inherent for any BERA; however, the nature and magnitude of the uncertainties depend upon knowledge regarding the use of the Site by the receptors, the amount and quality of data available and assumptions in exposure potentials and benchmarks used to assess the potential risks. Here, multiple conservative assumptions (e.g., geometric means of NOAEL and LOAEL values instead of arithmetic means across the NOAEL or LOAEL values) were intentionally used to take into account the uncertainties. The more conservative the assumptions, the less likelihood that a hazard quotient greater than 1.0 represents an unacceptable risk. Accordingly, any uncertainty in this analysis would overestimate rather than underestimate potential risk. This language was accepted and accordingly no change will be made to the text.²

6. *Page 20, Third paragraph: The text states that risks to piscivorous mammals were noted based on the mink model; however, it does not discuss the risk drivers as noted in other paragraphs for other receptors. For informational purposes and for consistency include risk drivers from the mink models.*

Response:

The referenced paragraph will be revised as follows: "Piscivorous Birds and Mammals: The BERA indicates that there is no risk to piscivorous birds (e.g., great blue heron) and a potential minimal risk to piscivorous mammals (e.g., mink) that consume the forage fish or tadpoles from the On-Site Ponds when all ponds were used for foraging (the HQLOAEL values were less than one for the individual ponds). None of the COPECs had HQLOAEL or HQNOAEL values greater than one on a site-wide basis or for the On-Site Ponds (individual ponds or combined) for this piscivorous birds. For the piscivorous mammal, none of the COPEC PAHs, pesticides, TEQs, or PCB results had HQLOAEL values greater than one for site-wide evaluation or any of the evaluated subareas. Two COPEC metals (copper and selenium) had calculated HQLOAEL values greater than one on a site-wide basis (which included ponds and wetland areas) only for this feeding guild. As discussed in the BERA, this was due in part to the relative sizes of the exposure areas (on-site ponds only versus on-Site Ponds plus wetlands)."

7. *Page 21, Section 3.2.3: The text states there is a low potential for risks to short-tailed shrews and America robins. The text should be revised to read ". . . risks to vermivorous birds and mammals from exposure to metals and PCBs were noted based on food chain models for the short-tailed shrew and American robin."*

Furthermore, although uncertainty is inherent in all risk assessments and should be discussed, the remainder of the text discusses just that, and not a summary of the results. The section should be revised to summarize (as the section title suggests) all noted risk drivers for each assessment endpoint evaluated.

Response:

The referenced sentences will be revised as follows to more closely align with the conclusions in the approved BERA: "The results of the BERA indicate that exposures to COPECs in the environmental media at the Site do not pose an ecological concern for most of the evaluated receptors, and that there is a low potential risk for vermivorous birds and mammals." The risk drivers are summarized by receptor type in Section 3.2.2 and will not be repeated in Section

² Acronyms in this response are as defined in the BERA.

3.2.3. The rERA provides further discussion of residual ecological risks to vermivorous birds and mammals for the different alternatives.

8. *Page 23, Section 4.2.1: Since risks to vermivorous birds and mammals were noted, were any of the preliminary remedial goals (PRGs) calculated done so to be protective of these receptors? Please clarify, as it doesn't appear any PRGs specific to the protection of ecological receptors were developed. If not, then values should be calculated and the lowest of those and the non-residential values should be used in order to be protective of both groups of receptors. In addition, the table provided only lists humans as the receptor for exposure to lead in the surface debris area. It is unclear why ecological receptors are not included, as direct contact with debris is expected. In addition, incidental ingestion of contaminated soil and food items needs to be included as an exposure pathway for ecological receptors for both the landfill surface and surface debris areas.*

Response:

Based on the results of the BERA, EPA has not required the Group to develop ecological PRGs. The FS has been revised to include as an appendix the rERA, which evaluates the impact on ecological receptors of FS Soil Alternatives 3, 4 and 5 and concludes that each of these alternatives will reduce post-remedy ecological risks to a level unlikely to result in ecological impacts, especially in light of the conservative assumptions used to calculate the exposures. Bolstering this conclusion, the Ecological Habitat Survey found that even in its current, unremediated state, the Site supports a varied ecological community, typical of these types of habitats in New Jersey. The rERA evaluates the residual ecological impacts for the alternatives. The rERA also evaluates the residual ecological impacts for the alternatives from exposures to multiple chemicals, including lead.

The comment regarding incidental ingestion is not correct. Incidental ingestion of soils/sediments was evaluated in the BERA when the exposure pathway was appropriate for the receptor (see BERA Table 3-4 series). Typically, soil ingestion contributed less than 30% to the total HQ values when the receptor also consumed biota from the Site.

9. *Page 27, Section 4.5, Remedial Action Objective (RAO) 1 is to: "Prevent or minimize current [and?] potential future unacceptable risks to human and ecological receptors through direct contact or ingestion of contaminated soil." In order to meet this RAO, were PRGs developed to be protective of ecological receptors ingesting contaminated soil and/or food items? Risk to vermivorous birds and mammals were noted, and these models were run using site-specific soil invertebrate data. Since Site-specific data were used in lieu of literature-based values, it is likely that risks calculated are representative of current Site conditions. Ensure that the PRGs are protective to all receptors to satisfy the objectives of this RAO.*

Response:

See response to General Comment 4 and Specific Comment 8.

10. *Page 29, Section 5.1, First paragraph, third sentence: The text states "the landfill is the only area with exceedances requiring remediation." Please clarify if the GSNWR portion of the Site is included in the "landfill".*

Response:

The term "landfill" as used in this section refers to all areas of the Site where landfilling occurred, including the Refuge.

11. *Page 29, Section 5.1, Second paragraph: In its current form, the text reads as if the entire Site is located in the Refuge. Revise the text to read that the small portion of the Site that lies within the GSNWR includes environmentally-sensitive areas, such as a designated National Wilderness Area. Furthermore, the Draft FS must acknowledge FWS's position that there is a current and active exposure pathway to ecological receptors and recreational users on the Refuge portion, and*

the protection of these receptors and restoration of the Wilderness Area should take precedent over temporary disturbances resulting from any removal and subsequent restoration activities which would eliminate future exposure and restore the area.

Response:

The text will be revised to read: "Another consideration in the identification of general response actions is that 35 acres of the landfill are located within an environmentally sensitive area within the GSNWR."

With respect to recreational exposures, see response to General Comment 4 and Specific Comment 1. With respect to ecological exposure, see response to General Comment 4 and Specific Comment 8.

12. *Page 30, First bullet: The statement is incorrect if "the landfill portion of the Site" includes the GSNWR. If the Refuge is included in this statement, it cannot be ruled out that recreationalists using the Refuge would enter the Site and are, therefore, potential receptors.*

Response:

See response to General Comment 4 and Specific Comment 1 for discussion regarding the use of the portion of the Site located within the Refuge for recreational purposes.

13. *Page 30, Third bullet: Define what is meant by "minor" risks and revise the sentence to read"...to vermivorous birds and mammals exist in..." Risks are present for a variety of birds and mammals within this feeding guild, not just shrews and robins.*

Response:

The bullet will be modified as follows: "The BERA indicates that there were HQLOAEL values greater than one for vermivorous birds (e.g., American robins) and mammals (e.g., short-tailed shrew) that consume soil invertebrates in the terrestrial habitat on the landfill. These HQ values are at or near those found in reference areas and/or within the bounds of the uncertainty in the assumptions (e.g., exposure assumptions, toxicity benchmarks) used for the risk calculations."

14. *Page 31, Second bullet: See General Comment 2.*

Response:

See response to General Comment 2 regarding the use of on-Site materials for a landfill cap.

15. *Page 35, First paragraph, third sentence: The paragraph fails to mention risks to ecological receptors. Revise the sentence accordingly.*

Response:

Text has been modified to address ecological risk concerns.

16. *Page 38, Last bullet: Note the FWS is a stakeholder, land manager, and has CERCLA authority over the portion of the Site on FWS-managed land. This bullet and the paragraph that follows should include FWS acceptance as part of the Modifying Criteria in the overall nine evaluation criteria as per the NCP.*

Response:

USFWS does not have CERCLA authority for the Overlap Area. While Executive Order 12580 does generally delegate the President's CERCLA response action authority to various agencies, including the Department of the Interior ("DOI"), where a release or threat of release is on or from a facility/site under the jurisdiction, custody, or control of the such agency, there are exceptions. Exec. Order No. 12580, 3 CFR 193 (1987). One such exception is for sites that are on the National Priorities List. *Id* at §2(e)(1). As the Rolling Knolls Landfill is on the National Priorities

List, this Executive Order does not delegate to DOI (or USFWS) response action authority for the Site.

The Statement of Principles for Collaborative Decision Making at Mixed Ownership Sites is clear that it does not alter or expand the rights and obligations delegated to an agency by Executive Order 12580. See Statement of Principles for Collaborative Decision Making at Mixed Ownership Sites, OSWER Directive 9200.06-1. Indeed, the Statement of Principles highlights the "importance of identifying each agency's roles and responsibilities." *Id.*

All that is required of the EPA and USFWS under the Statement of Principles is that they "consider each other's priorities for mixed ownership sites during internal agency priority-setting processes." *Id.* This does not mean that the agencies must agree on the appropriate action. In fact, the Statement of Principles anticipates that there will be situations where agencies do not agree and provides that the disagreement "should be resolved informally whenever possible." *Id.* In the event that the disagreement cannot be resolved informally, each agency "may explore mechanisms by which either party may conduct response activities at the site." *Id.* However, as USFWS does not have response authority at the Rolling Knolls Landfill, all USFWS is empowered to do is put forth its opinion for consideration by EPA. The responsibility for selecting the appropriate response action ultimately lies with EPA. Accordingly, the last bullet on page 38 will not be amended to include USFWS acceptance as part of the Modifying Criteria in the overall nine evaluation criteria.

17. *Page 41, Section 6.2: Alternative 2 will include both institutional controls and access restrictions. Review of Figure 6-1 shows the proposed fence location ending abruptly where it meets FWS property, leaving the entire eastern and southern portion of the site accessible to wildlife and potentially recreational hikers utilizing the Wilderness Area. This alternative is not protective of either, especially ecological receptors as it allows wildlife to forage and come into direct contact with contaminated media.*

Moreover, the placement of a deed restriction or equivalent institutional control would not be allowed on the federal property. Please clarify in the text that this alternative would only pertain to the portion of the Site currently held by the Miele Trust.

Response:

Soil Alternative 2 as written is protective of human receptors. See response to General Comment 4 and Specific Comment 1 for discussion regarding the potential risk to recreational hikers on the Refuge.

Page 42, Section 6.2.1, second bullet already reads "This alternative does not significantly limit ecological exposures at the Site." No changes will be made to this section.

The text in the FS will be clarified to indicate that the placement of a deed restriction or equivalent institutional controls would only pertain to the portion of the Site currently held by the Miele Trust. However, even without the deed restriction or equivalent institutional controls, development is restricted in the Overlap Area due to its designation as a Wilderness Area. Existing statutory and regulatory limitations serve to restrict development on the Refuge portion of the Site. Moreover, USFWS indicated in the 1975 USFWS Letter that "we will not attempt any further action to alter or develop these lands."

18. *Page 42, Section 6.2.1, second bullet: Revise the text to read vermivorous birds and mammals, not robins and shrews. In addition, delete any reference regarding the destruction of on-Site habitats. See General Comment 5.*

Response:

The second bullet will be revised to read: "However, the results of the BERA indicate that exposures to COPECs in the environmental media at the Site do not pose an ecological concern

for most of the evaluated receptors, and that there is a low potential risk for vermivorous birds and mammals."

The potential destruction of habitat with this alternative is accurate and relevant. See response to General Comment 2. The language will not be removed.

See response to General Comment 5.

19. *Page 43, Section 6.2.3, second bullet: Please describe how an open-ended fence would minimize direct contact of Site media to ecological receptors. Figure 6-1 depicts the proposed fence ending at GSNWR property leaving the entire eastern and southern portion of the Site accessible to wildlife.*

Response:

The second bullet will be revised to read: "Fencing is a common technology to minimize potential direct contact by human receptors."

20. *Page 45, Section 6.3, first sentence: The text states that the area targeted for remediation is where soils contribute the majority of risk to trespassers. Why wasn't risk to ecological receptors used in the decision process to determine the area of proposed capping? Since utilization and access of the Site by wildlife is far greater than trespassers, the footprint of the area for proposed capping should be protective for both receptors. In addition, recreational users are expected to utilize portions of the Site located on the GSNWR. Thus, the remedy selected for this area must be protective for these receptors as well.*

Response:

See response to General Comment 4 and Specific Comment 8.

21. *Page 46, first paragraph: The text discusses "the need for potentially thousands of truck trips" that would be needed to haul in outside material for use of a cap. The parties have discussed on multiple occasions the possible use of on-Site material for a landfill cap. It is well-documented that the underlying clay unit at the Site is well in excess of 25 feet thick. Use of this on-Site material would eliminate most, if not all of the concerns related to hauling in material from off-Site sources. The construction of landfill caps utilizing the same clay unit that underlies the area has been successfully implemented at two former landfills located a short distance away from the Site. In addition, the text is suggestive in nature and portrays on-Site habitats as if they consist of a native, intact plant community of exceptional habitat value. This could not be further from the truth. The Site is dominated by a plant community comprised primarily of invasive, ruderal species providing limit habitat value. In addition, there are several locations on the landfill where refuse is present at the surface and is intermixed in these habitats. Any suggestions that the destruction of these habitats, and subsequent revegetation be avoided is misleading and should be removed from the text.*

Furthermore, the text implies that restoration of areas undergoing remediation with grasses would not be reflective of the naturally-occurring habitat. The PRP Group is not empowered to make such determinations. FWS, utilizing its CCP, determines the strategic management direction for the Refuge that best achieves the Refuge's purposes, including future uses, contributions to the National Wildlife System mission, and management actions needed to achieve desired conditions at GSNWR. While landfill operations (e.g., the placement of refuse and swamp muck cover) may have created conditions suitable for the colonization of upland invasive vegetative species which dominate the landscape today, revegetation with native forbs and/or grasses would greatly improve the Site in terms of habitat value and wildlife usage. This is important to note, as the Site is bounded by environmentally sensitive habitats and is potentially host to, or is utilized by Federally-listed species as noted in the Draft FS.

Response:

See response to General Comment 2 regarding the use of on-Site materials for a landfill cap.

The text of the FS will be revised to indicate that capped and excavated/backfilled areas will be revegetated with species native to New Jersey. To the extent practicable and consistent with engineering best practices, revegetation on the Refuge, if any is required, will align with the CCP and will be conducted in consultation with FWS.

22. *Page 47, continuation of Section 6.3.1: See General Comment 2 and Specific Comment 21 regarding the destruction of on-Site habitats and restoration with grasses.*

Response:

See response to General Comment 2 and Specific Comment 21 regarding the destruction of existing on-Site habitat and revegetation with grasses.

23. *Page 47, Section 6.3.2: See General Comment 3, regarding the alternative's non-compliance with the Wilderness Act of 1964 and Great Swamp Wilderness Act of 1968 ARARs. These laws were enacted to preserve the "wilderness character" of the specific portions of the Refuge for the "use and enjoyment of the American people in a way that will leave those areas unimpaired to future use and enjoyment as Wilderness."*

Response:

See response to General Comment 3. Alternative 3 as written complies with both the Wilderness Act of 1964 and the Great Swamp Wilderness Act of 1968.

24. *Pages 48 and 49, Section 6.3.5, first and third bullets: See General Comments 2 and Specific Comment 21 regarding trucks and destruction of on-Site habitats and restoration with grasses.*

Response:

See response to General Comment 2 and Specific Comment 21 regarding the destruction of existing on-Site habitat and revegetation with grasses.

25. *Page 49, Section 6.3.6, first bullet: The text discusses the construction challenges associated with the presence of "high-value wildlife habitats". The presence of high-value habitats are extremely limited and it is misleading to make such a statement. See General Comment 2 and Specific Comment 21 regarding current conditions and use of grasses for post remedial restoration.*

In addition, provide more detailed specifics as to why a storm water detention basin will be required.

Response:

With respect to habitat values and use of grasses for post remedial restoration, see response to General Comment 2. The sentence will be revised to read: "There are construction challenges associated with the presence of wetlands and wildlife habitats adjacent to remediation areas and minimizing wetland destruction when incorporating stormwater controls for the Selected Area cap."

26. *Page 52, first paragraph: See General Comment 2 and Specific Comment 21 regarding truck traffic and use of on-Site material.*

Response:

See response to General Comment 2 and Specific Comment 21.

27. *Page 53, first paragraph, second sentence: The text suggests that after capping, the Site would create conditions for the "development of non-native habitat". Currently, the majority of on-Site*

habitats are non-native. See General Comment 2 and Specific Comment 21 regarding the conditions and destruction of current on-Site habitats and delete this sentence. In addition, delete that last sentence or clarify how there would be an increase in greenhouse emissions given that any loss of habitat would be revegetated as noted several times in the document.

Response:

See response to General Comment 2 and Specific Comment 21.

With respect to greenhouse emissions, not all lost habitats will be replaced. For instance, access roads will be required where none currently exist. In addition, operation and maintenance activities will require additional vehicular traffic. The greenhouse gas sentence will remain.

28. *Page 53, Section 6.4.2: See General Comment 3, regarding the alternative's non-compliance with the Wilderness Act of 1964 and Great Swamp Wilderness Act of 1968 ARARs. These laws were enacted to preserve the "wilderness character" of the specific portions of the Refuge for the "use and enjoyment of the American people in a way that will leave those areas unimpaired to future use and enjoyment as Wilderness."*

Response:

See response to General Comment 3. Alternative 4 as written complies with both the Wilderness Act of 1964 and the Great Swamp Wilderness Act of 1968.

29. *Page 54, Section 6.4.5, first bullet: See General Comment 2 and Specific Comment 21 regarding use of on-Site materials and concerns related to hauling in material from off-Site sources.*

Response:

See response to General Comment 2 and Specific Comment 21 regarding the destruction of existing on-Site habitat and revegetation with grasses.

30. *Page 55, Section 6.5: Alternative 5 includes the capping of the entire landfill. Provide clarification as to why the entire 140 acres (as noted) would need to be capped. It would seem more feasibly from several perspectives to consolidate all landfilled material into a centralized portion of the Site consisting of one or several areas and then cap. This would greatly reduce the landfill footprint.*

Response:

All remedial alternatives were developed during the remedy development and screening process as overseen by EPA. The results of this process were provided in the Technical Memorandum, Development and Screening of Remedial Alternatives (Geosyntec Consultants 2107) ("DSRA Tech Memo"), which preceded the FS Report. Remedial alternatives were selected to address preliminary RAOs based on the screening of remedial technologies discussed in the DSRA Tech Memo. EPA approved the RAOs. Reducing the landfill footprint is not required to address risks related to constituents of concern at the Site. Thus, EPA did not require a consolidation and capping alternative in the FS. The Soil Alternative 3 in the FS does consider consolidating materials removed from the APCs beneath the cap.

31. *Page 55, First bullet: See General Comment 2 and Specific Comment 21 regarding the conditions and destruction of current on-Site habitats.*

Response:

See response to General Comment 2 and Specific Comments 21 and 25.

32. *Page 55, Section 6.4.6, first bullet: See Specific Comment 25.*

Response:

See response to Specific Comment 25.

33. *Page 57, Section 6.5, second paragraph: See General Comment 2 and Specific Comment 21 regarding the conditions and destruction of current on-Site habitats.*

Response:

See response to General Comment 2 and Specific Comments 21. To the extent practicable and consistent with engineering best practices, revegetation will align with the CCP and will be conducted in consultation with USFWS.

34. *Page 58, Section 6.5.1, second bullet: See General Comment 2 Specific Comments 21 and 27 regarding revegetation with grasses and increase in greenhouse emissions.*

Response:

See response to General Comment 2 and Specific Comments 21 and 27 regarding the destruction of existing on-Site habitat, revegetation with grasses and greenhouse gas emissions.

35. *Page 58, Section 6.5.2: See General Comment 3, regarding the alternative's non-compliance with the Wilderness Act of 1964 and Great Swamp Wilderness Act of 1968 ARARs. These laws were enacted to preserve the "wilderness character" of the specific portions of the Refuge for the "use and enjoyment of the American people in a way that will leave those areas unimpaired to future use and enjoyment as Wilderness."*

Response:

See response to General Comment 3. Alternative 5 as written complies with both the Wilderness Act of 1964 and the Great Swamp Wilderness Act if 1968.

36. *Page 60: second bullet: See General Comment 2 and Specific Comment 21 regarding restoration of areas with grasses.*

Response:

See response to General Comment 2 and Specific Comments 21.

37. *Page 61, first paragraph: See General Comment 2 and Specific Comments 21 and 25 regarding truck traffic, presences of "high-value" habitats, and detention basins.*

Response:

The sentence will be revised to read: "There are construction challenges associated with the presence of wetlands and wildlife habitats and incorporating stormwater controls into the limited Site space." See response to General Comment 2 and Specific Comments 21 and 25.

38. *Page 63, second paragraph, last three sentences: See General Comment 2 and Specific Comments 21 and 27.*

Response:

See response to General Comment 2 and Specific Comments 21 and 27.

39. *Page 63, Section 6.6.2: Alternatives 3 through 5, as currently drafted, will not comply with the Wilderness Act of 1964 and Great Swamp Wilderness Act of 1968 ARARs. These laws were enacted to preserve the "wilderness character" of the specific portions of the Refuge for the "use and enjoyment of the American people in a way that will leave those areas unimpaired to future use and enjoyment as Wilderness." The FWS has, on multiple occasions, discussed with the Group its willingness to cooperate in both a technical and administrative manner to ensure that remedial activities within the Wilderness Area go as smoothly as possible. With that context in mind, discuss in detail the "additional challenges" and costs with any remedial activities to be conducted on GSNWR property.*

Response:

See response to General Comment 3. Alternatives 3 through 5 as written comply with both the Wilderness Act of 1964 and the Great Swamp Wilderness Act of 1968.

The additional challenges include compliance with any GSNWR rules that might impact access, use of equipment, building roads or other physical access, or other limitations that would not apply to work on the Miele portion of the site. Notwithstanding the stated willingness of USFWS "to cooperate in both a technical and administrative manner to ensure that remedial activities within the Wilderness Area go as smoothly as possible," we agree that there will be additional technical and administrative requirements for work in the Refuge that do not apply to the privately owned portion of the Site.

40. *Page 64, Section 6.6.7, third sentence: The text states the Alternative 5 will include "the most extensive work in the GSNWR". The FWS fully supports the removal of contaminated media and refuse followed by restoration within the portion of the site located on the Refuge.*

Response:

See response to General Comment 1 and Specific Comment 16.

41. *Page 65, Section 6.6.8: The summary repeats many of the problematic discussions that are highlighted in previous comments.*

Response:

See responses to previous comments.

42. *Page 80, second paragraph, second and third sentences: The text needs to clarify if the GSNWR portion of the Site is included as part of the landfill in this discussion. If it is, then the expectation that the area will not be used for recreational purposes is incorrect as the Wilderness Area of the GSNWR is open to hiking and other passive recreational activities.*

Response:

The text this comment is referencing cannot be identified. Page 80 contains five bullet points, all of which are only one paragraph in length. The comment must be clarified before an appropriate response can be prepared. See response to General Comment 4 and Specific Comment 1 for discussion regarding the use of the portion of the Site located within the GSNWR for recreational purposes.

43. *Appendix A. Risks from exposure to Site contaminants to ecological receptors were noted in the BERA; however, the remediation goals used in the FS were calculated based on human exposure. Clean up levels should be derived so they are protective of all receptors.*

Please clarify the risk management decisions/agreements that were made prior to the development of the clean-up goals presented in the FS. In other words, were the risk drivers retained from the risk assessments and remedial investigation agreed upon and approved by the regulatory agencies and then used in the development of the proposed alternatives and areas targeted for remediation?

Response:

The risk management decisions made prior to the development of the clean-up goals and presented in the FS Report are contained in the previous reports submitted to the EPA. These include the BHHRA, the BERA, the Remedial Investigation Report, and the DSRA Tech Memo. These reports, which had been provided to USFWS for review and comment and which EPA has now approved, are the basis for the FS Report. See also the response to General Comment 4 and Specific Comment 8.

44. *Appendix B: Appendix B disregards risks identified in the BERA resulting in the 25 acre "Selected*

Area" for remediation to be based only on human health risks. The remedy should be protective of all receptors which utilize the site. In addition, in the section "Anticipated Future Use" the text states that recreational users are not anticipated. This is incorrect as a portion of the site is located with the GSNWR Wilderness Area which is open to passive recreation. In addition, after review of the proposed alternatives, no measures would be established to keep visitors in the Wilderness Area from entering other portions of the site as any fencing installed would end once it reaches Refuge boundaries allowing full access to the portion of the Site outside Refuge property.

Response:

See response to General Comment 4 and Specific Comment 1 for discussion regarding the use of the portion of the Site located within the GSNWR for recreational purposes. See response to Specific Comment 8 with respect to ecological receptors. See response to Specific Comment 17 with respect to fencing.

45. *Table 4.1: The following two TBCs were not included from FWS's list and should be reinserted into the ARARs Table in the Draft FS: (1) Policy on the Appropriateness of Refuge Uses (603 FW 1). This policy elaborates on the appropriate uses of a NWR, ensuring that such uses contribute to fulfilling the specific refuge's purposes and the National Refuge System's mission. (2) Policy on Compatibility (603 FW 2). This policy specifies the guidelines for determining the compatibility of proposed uses of a NWR. This determination is done once a proposed use is deemed appropriate.*

Response:

These USFWS policies will be added to Table 4.1 as TBCs.

46. *Table 4.1: Several cultural resource ARARs from FWS's list were not included in the Draft FS, including the Native American Graves Protection and Repatriation Act (NAGPRA) and the National Archaeological and Historic Preservation Act. FWS continues to advocate for these ARARs. If remediation activities at the Rolling Knolls Landfill Site result in the discovery of Indian human remains or historical and archaeological data which might otherwise be irreparably lost or destroyed, requirements of these cultural statues should be met.*

Response:

The Native American Graves Protection and Repatriation Act (NAGPRA) and the National Archaeological and Historic Preservation Act will be included in Table 4-1 as to be considered (TBC) and will be addressed should remediation activities at the Site result in the discovery of Indian human remains or historical and archaeological data.

47. *Table 4.1: The "Final Comprehensive Conservation Plan, Great Swamp National Wildlife Refuge, November 2014," should be an Applicable ARAR for the Refuge portion of the Site (not just a TBC). The National Wildlife Refuge System Improvement Act requires FWS to adopt a Comprehensive Conservation Plan for each unit or complex of units within the System and, once adopted, FWS must manage each unit of the System in accordance with the requirements of its respective CCP. 16 U.S.C. § 668dd(e).*

Response:

Regardless of whether the CCP is classified as an ARAR or a TBC, all of the proposed alternatives are consistent with the Refuge's CCP. See response to Specific Comment 1 for discussion of compliance with the CCP.

Exhibit A



TOWNSHIP OF CHATHAM

Township Hall
24 Southern Boulevard
Chatham, New Jersey 07928
635-4800

Please reply to:

January 14, 1975

Board of Health

Mr. Richard E. Griffith
Regional Director
Bureau of Sport Fisheries and Wildlife
Fish and Wildlife Service
Department of the Interior
U.S. Post Office and Courthouse
Boston, Massachusetts 02109

Dear Mr. Griffith:

On the afternoon of July 18, 1974 a fire was discovered in the northeastern section of the Great Swamp National Wildlife Refuge in Chatham Township. The land involved was acquired by the United States of America from the Estate of Angelo J. Miele, which for a number of years conducted a refuse disposal operation on the property.

It was almost a week before the fire was extinguished. The fire was fought by numerous local fire companies, the New Jersey Forest Fire Service and by several contractors who provided bulldozers. Thousands of man hours and considerable expenses were involved. Rescue squads treated firefighters, especially those affected by smoke. Copies of newspaper articles on the fire are attached.

Reports from persons at the scene indicate that the fire extended to a considerable depth in the refuse material. Heavy smog and odors permeated the surrounding communities:

The Miele landfill, which was terminated on December 31, 1968, was subject to the provisions of Ordinance BH-2-63 adopted by this Board of Health. Section 6 of Article VI provides as follows:

"6. Final Cover

A final earth cover for surface and side slopes shall be compacted and maintained at a depth of not less than 24 inches."

TOC 00536

Mr. Richard E. Griffith

-2-

January 14, 1975

State regulations for sanitary landfills as set forth in the New Jersey State Sanitary Code contain a similar requirement.

It would appear that compliance with the foregoing requirement for final cover would have prevented an outbreak of fire at the refuse disposal site.

On April 3, 1969 a letter was sent by our Board to Mr. George Gavutis, Refuge Manager, Great Swamp National Wildlife Refuge, directing his attention to the above-quoted provision of Ordinance BH-2-63 and requesting him to advise our Board of the action to be taken to comply with the provision. Under date of May 6, 1969, you wrote to our Board stating that you would soon be meeting with representatives of the Estate of Angelo J. Miele and would resolve the matter of compliance with the Ordinance requirement.

Although we were not informed as to the outcome of your conference, no final cover for the refuse has ever been provided.

At this time your office has undoubtedly completed its assessment of the unfortunate outbreak of fire last July, including its causes and the steps which should be taken to prevent a recurrence.

Would you kindly advise our Board of Health as to plans for compliance with the requirement for final cover and any other action to be taken to avoid the hazards of future fires at this site.

Very truly yours,

Frank Kling,
President

Enclosures

TOC 00537

Copy to Bd. of Health and Attt. Miller 5/23/75



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Post Office and Courthouse Building
BOSTON, MASSACHUSETTS 02109

MAY 16 1975

Mr. Frank Kling, President
Board of Health
Township of Chatham
24 Southern Boulevard
Chatham, New Jersey 07928

Dear Mr. Kling:

In answer to your letter of January 14th regarding the disposition of the governments deliberations over the Miele dump, I am sorry that we failed to respond to your former request. Although acquisition considerations continued into 1972, we are no longer considering any additional acquisitions in the vicinity of Miele's dump, or within Chatham Township. The government did not acquire an additional acreage from the Miele estate after the closing of the sanitary landfill in 1968. The current refuge boundary will stand.

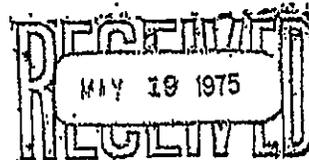
We are well aware that the Miele dump was not covered in accordance with state regulations and the Chatham Township landfill ordinance. Our small peripheral holdings on the south and east sides of the dump remain uncovered. Approximately two acres on the easterly side were involved in the July, 1974 fire, the remainder (some 12-14 acres) were on Mr. Miele's property. The fire originated off-refuge, presumably caused by spontaneous combustion within the dump. A two-foot cover of earth might have smothered the fire. However, at this late date, we do not anticipate taking any legal action. If the township should decide to do so, such is your prerogative.

Since the landfill section acquired by the government as a buffer now lies within the designated boundary of the Great Swamp Wilderness Area, we will not attempt any further action to alter or develop these lands. Access would first necessitate the covering of Mr. Miele's landfill, an extremely expensive undertaking at this point in time. It would also require special exception to the Wilderness Preservation Act.



Save Energy and You Serve America!

TOC 00534



As time passes, decomposition progresses and the threat of fire on the open dumplands diminishes. Granted, it remains an eyesore. However; despite the lack of an earthen cover, the process of re-vegetation had begun prior to the fire. This process should accelerate on the burnt-over portions of the site. Covering the periphery of the landfill now might cause more damage than leaving it alone. Special considerations would also have to be given to erosion control, due to the adjoining marshlands and slope. Much of the dumpland within the wilderness has sloughed to marsh level or has become subaqueous because of past decomposition and erosion.

Currently, our major concern is caused by the lateral leaching of pollutants into the Wilderness Area. As with other past refuge dump sites, we continue to monitor the effects of such wastes. But the damage has been done and both man and wildlife will continue to suffer the consequences. Although wildlife in the immediate environs are in direct jeopardy as a result of potentially lethal drainages, the swampland functions as a filter lessening the threat to human populations downstream. It is our contention and commitment that nature should now be allowed to take its course. The damage is irreversible and unreparable, except by time.

Sincerely yours,

Richard E. Griffel
Regional Director

EXHIBIT

B

Copy to Bd. of Health and ATtt. Miller 5/23/75



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Post Office and Courthouse Building
BOSTON, MASSACHUSETTS 02109

MAY 16 1975

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Board of Health
Township of Chatham
24 Southern Boulevard
Chatham, New Jersey 07928

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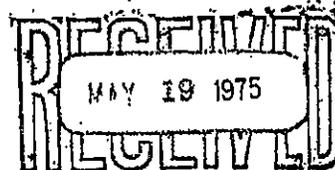
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Sincerely yours,

Richard E. Griffith
Regional Director

EXHIBIT

C

NEW JERSEY LEGACY LANDFILL LAW IS NOT APPLICABLE TO THE REMEDiation OF THE ROLLING KNOLLS SUPERFUND SITE

I. Introduction

The Legacy Landfill Law, N.J.S.A. 13:1E-125.1 et seq., (the “Law”), became effective June 26, 2013. As described by the New Jersey Senate Environment and Energy Committee, the Law “establishes requirements and controls applicable to ‘legacy landfills’ and properly closed sanitary landfill facilities that accept the placement of new materials after closure.” Senate Environment and Energy Committee Statement to Senate No. 2862 with committee amendments, June 13, 2013. The Law defines “legacy landfill” to mean “a landfill that ceased operations prior to January 1, 1982, and received for disposal: (1) solid waste; or (2) waste material that was received for disposal prior to October 21, 1976 and that is included within the definition of hazardous waste adopted by the federal government pursuant to the ‘Resource Conservation and Recovery Act,’ 42 U.S.C. s.6921 et seq.” See N.J.S.A. 13:1E-125.1.

Pursuant to the Law, the New Jersey Department of Environmental Protection (“NJDEP”) proposed to amend the solid waste rules, N.J.A.C. 7:26, recycling rules, 7:26A, air pollution control rules, 7:27, and the air administrative procedures and penalties, 7:27A, as they pertain to legacy landfills (collectively referred to hereinafter as the “Rule Proposal”). The Rule Proposal was adopted, with non-substantial changes, on August 8, 2017. (The adopted rules are hereinafter referred to as the “Solid Waste Rules.”) The Solid Waste Rules; however, do not accurately reflect the requirements embodied in the Law.

In cases where there are discrepancies between a statute, and the regulations adopted pursuant to that statute, the statute and not the rules control. *New Jersey Ass’n of Realtors v. New Jersey Dept. of Environmental Protection*, 367 N.J. Super 154, 160 (App. Div. 2004). It is a well-settled principle that “a rule will be set aside if it is inconsistent with the statute it purports to interpret.” *In re Freshwater Wetlands Protection Act Rules*, 180 N.J. 478, 489 (2004) (quoting *Smith v. Director, Div. of Taxation*, 108 N.J. 19, 26 (1987) (internal quotation marks omitted)); see also *In the Matter of Freshwater Wetlands Prot. Act Rules, N.J.A.C. 7:7A-1.1 et seq.*, 570 A.2d 435, 441 (App.Div.1989) (quoting *Kamienski v. Bd. of Mortuary Science*, 194 A.2d 743 (App.Div.1963)) (“When the rule of an administrative agency contravenes the statute that created it, the rule lacks legal efficacy.”). As demonstrated below, the Law and the Solid Waste Rules are inconsistent on an issue directly applicable to the Rolling Knolls Landfill. That inconsistency must be resolved in favor of the Law.

II. The Law’s Closure Requirements are not Applicable to NPL Sites

While the Rolling Knolls landfill falls within the Law’s definition of “legacy landfill,” the Law was never intended to apply to legacy landfills listed on the National Priorities List under CERCLA. The Law defines “Closure” or “Closure costs” to mean:

activities and costs associated with the design, purchase, reuse, construction, or maintenance of all measures deemed necessary by the Department of Environmental Protection, pursuant to law, in order to prevent, minimize, or

monitor pollution or health hazards resulting from a legacy landfill or any other landfill subsequent to the termination of operations at any portion thereof, including, but not necessarily limited to, the costs of general liability insurance, the placement or regrading of fill material, the placement of final earthen or vegetative cover, the installation of methane gas vents or monitors and leachate monitoring wells or collection systems, and long-term operations and maintenance, at the site of a legacy landfill or any other landfill that is *not listed on the National Priorities List pursuant to the "Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. s.9605.*

N.J.S.A. 13:1E-125.1 (emphasis added). The definition explicitly exempts landfills, such as Rolling Knolls, that are listed on the National Priorities List ("NPL") and that will be subject to remediation under CERCLA. While many sections of the Law were revised on the senate floor, there were no changes to the language exempting NPL sites from the definition of closure, indicating that there was no debate that NPL sites should not be included in the meaning of closure or closure costs. See Senate Floor Amendments, Statements to S. 2861 (June 20, 2013). The Law's exemption of legacy landfill NPL sites is patently reasonable, because the remedial activities will be undertaken pursuant to the robust regulations and oversight of the US Environmental Protection Agency as well as NJDEP.

While the legislature clearly exempted actions taken at NPL sites from the definition of closure and closure costs under the Law, the NJDEP failed to incorporate this exemption into the Solid Waste Rules it enacted pursuant to the Law. In the Rule Proposal, NJDEP acknowledged that the Law exempts landfills that are listed on the NPL from the definition of closure and explained that "A landfill that is listed on the National Priorities List is commonly known as a 'Superfund' site." Rule Proposal at 8. Yet despite that acknowledgment, the NJDEP concluded, "The Law's definition of 'closure' or 'closure costs' is consistent with the definition of 'closure' in the Department's rules at N.J.A.C. 7:26-2A.9(b)." *Id.* However, the definition of closure in the rules cited in that statement does not include the NPL exemption. See N.J.A.C. §7:26-2A.9(b).

The NJDEP's conclusion that the definition of closure in the Law is consistent with the definition in the Solid Waste Rules is simply incorrect. The definition in the Law, by its express terms, excludes sites listed on the NPL. The definition in the Rules contains no such exclusion. An agency's rule promulgated to enforce the statute that the agency is responsible for enforcing will be "set aside if it is inconsistent with the statute it purports to interpret." *In re Freshwater Wetlands Protection Act Rules*, 180 N.J. 478, 489 (2004) (quoting *Smith v. Director, Div. of Taxation*, 108 N.J. 19, 26 (1987) (internal quotation marks omitted)). Accordingly, courts set aside any regulation that is "plainly at odds with the statute". *Ibid.* (citing *New Jersey Tpk. Auth. v. AFSCME Council 73*, 150 N.J. 331, 351-52 (1997)). Because NJDEP's definition of the term "closure" in the Solid Waste Rules plainly conflicts with the definition in the Law, NJDEP's definition in the rules is invalid as it pertains to legacy landfills that are listed on the NPL.

Further, it is well settled that "[b]ecause regulations must coexist with state statutes, when a statute deals with a specific issue or matter, the statute is 'the controlling authority as to the proper disposition of that issue or matter.'" *New Jersey Ass'n of Realtors v. New Jersey Dept. of*

Environmental Protection, 367 N.J. Super 154, 160 (App. Div. 2004) (quoting *Terry v. Harris*, 175 N.J. Super, 482, 496, 420 A.2d 353 (Law Div.1980)). Thus, the definition of closure in the Law, which exempts NPL sites like Rolling Knolls, is controlling in this situation.

III. Expanded Requirements for Legacy Landfills Listed on the NPL under the Solid Waste Rules Are Invalid

While the Law defines “closure,” it does not actually mandate or provide requirements for closure of a legacy landfill. See N.J.S.A. 13:1E-125.1 et seq. Rather, the Law presupposes that one will undertake closure activities either voluntarily or pursuant to some other administrative consent order, agreement, permit, or approval (N.J.S.A. 13:1E-125.2) or when a legacy landfill facility (which by definition has ceased operations) “undertakes any activity that includes the placement or disposal of any material.” N.J.S.A. 13:1E-125.7.a. In these instances, the Law sets out a narrow set of requirements.

Under the Law, an owner or operator that undertakes closure of a legacy landfill or proposes to bring any materials to a legacy landfill must obtain site plan approval under the Municipal Land Use Law. N.J.S.A. 13:1E-125.3. The Law also mandates who must perform the closure and oversee any other activities conducted at the legacy landfill. N.J.S.A. 13:1E-125.7.a. Additionally, when a legacy landfill accepts recyclable material, contaminated soil, wastewater treatment residual material or construction debris, the owner or operator is required to provide financial assurances to pay for closure costs. N.J.S.A. 13:1E-125.5.

Rather than drafting the rules to effectuate these relatively narrow requirements, NJDEP expanded the requirements under the Law to create one set of rules “that address closure and post-closure care and disruption of all sanitary landfills.” Rule Proposal at 4-5. The effect of this was to extend substantial requirements for closure and post-closure care of sanitary landfills (N.J.A.C. 7:26-2A.9) to legacy landfills, without any statutory authorization to do so. Prior to adopting the Solid Waste Rules, the requirement to complete and submit Closure and Post-Closure Plans only applied to a landfill operating on or after January 1, 1982. See Rule Proposal at 6. With the new rules, NJDEP acknowledged that it intended to “extend some requirements of the Law to all sanitary landfills” and that it was “extending the existing rules” to legacy landfills, even though the Law does not contain those requirements. See Rule Proposal at 4-5, 10. In so doing, the NJDEP failed to carry into the regulations the Law’s exclusion of NPL sites from the definition of closure. While the NJDEP’s desire to provide the regulated community and the public with one comprehensive set of rules may have been well intentioned, “administrative convenience cannot support a regulation that conflicts with the governing statute.” *In re Freshwater Wetlands Protection Act Rules*, 180 N.J. 478, 491 (2004) (quoting *Smith v. Director, Div. of Taxation*, 527 A.2d 843, 850 (1987)).

“It is well settled that ‘[a]dministrative regulations cannot alter the terms of a legislative enactment...’ *New Jersey Ass’n of Realtors v. New Jersey Dept. of Environmental Protection*, 367 N.J. Super 154, 159-160 (App. Div. 2004) (quoting *In the Matter of Freshwater Wetlands Prot. Act Rules*, N.J.A.C. 7:7A-1.1 et seq., 570 A.2d 435 (App.Div.1989)). An agency “may not under the guise of interpretation...give the statute any greater effect than its language allows.” *In re Freshwater Wetlands Protection Act Rules*, 180 N.J. 478, 489 (2004). If the legislature had

wanted to extend the closure requirements to legacy landfills that are listed on the NPL, it could have done so. See *Id.* at 490-491. It did not. Instead, the legislature expressly excluded NPL sites from the Law's definition of closure. The NJDEP's failure to incorporate this exclusion into the Solid Waste Rules is improper administrative overreach.

IV. Conclusion

Even though the Rolling Knolls Landfill falls within the definition of a legacy landfill, its status as an NPL site excludes it from the Law's definition of closure, and nothing in the Solid Waste Rules can change this. Accordingly, neither the Law nor the Solid Waste Rules are ARARs for EPA's remedy decision for the Rolling Knolls Superfund Site.

EXHIBIT

D

Rolling Knolls Landfill Superfund Site
Great Swamp National Wildlife Refuge Deed Notice Analysis

Executive Summary

Consistent with other Superfund Sites located on the Great Swamp National Wildlife Refuge (the “Refuge”) where contamination remained in place at levels above the New Jersey Residential Soil Standards, there is no need for a deed notice on the portion of the Rolling Knolls Landfill Superfund Site (the “Site”) located on the Refuge, as existing statutory and regulatory restrictions protect the property from future development or future land use changes that might potentially conflict with the remedy selected for the Site. As part of a National Wilderness Area, any changes in the future use or ownership of the Refuge portion of the Site would require Congressional approval. In essence, the land will be managed by the United States Fish and Wildlife Service (“USFWS”) in perpetuity as wildlife habitat with limited public use and access. Moreover, the Great Swamp Comprehensive Conservation Plan (“Great Swamp CCP”) places the public on notice that a portion of the Rolling Knolls Landfill Superfund Site is on the Refuge. Accordingly, there is no need for a deed notice to be placed the Refuge portion of the Site, since a deed notice will not provide any additional protections that are not already in place.

I. Background on the Great Swamp National Wildlife Refuge

The process of designating a wilderness area is largely conducted by Congress at the recommendation of the President and Secretary of the Interior. The Great Swamp was established by Congress as a refuge on November 3, 1960, and formally designated as a refuge on May 29, 1964.¹ During those four years, the Great Swamp Committee of the North American Wildlife Foundation (“NAWF”) acquired and donated approximately 3,000 acres to the United States, which formed the nucleus of today’s Great Swamp.²

¹ See USFWS, Great Swamp National Wildlife Refuge, A Report on Wilderness Character Monitoring 2 (Dec. 16, 2011), available at <http://www.wilderness.net/toolboxes/documents/WC/Great%20Swamp%20NWR%20Wilderness%20Character%20Monitoring,%20Final%20Report,%202011.pdf>.

² See *id.*; see also Mark Di Ionna, *The Great Swamp*, THE STAR-LEDGER, Jan. 14, 2010, available at http://www.nj.com/insidejersey/index.ssf/2009/02/the_great_swamp.html (noting that NAWF had only 1,000 acres in 1960 and did not acquire the 3,000 acres needed to satisfy federal wildlife refuge requirements until 1964).

The property acquired by NAWF for the Great Swamp included property formerly owned by the Trust Created Under the Last Will and Testament of Angelo J. Miele (the “Trust”), which was transferred to the United States by a deed dated February 28, 1964, and recorded in Morris County on March 5, 1964.³ This deed transferred approximately 300 acres subject to a few easements and conditions. Most of the easements were for utilities, but the Trust expressly reserved an easement for sanitary landfill operations on a portion of the transferred property, which easement expired on December 31, 1968.⁴ Based on available documentation, the landfill remained in operation when the USFWS took possession of the property in 1964 and most likely continued to be used until the landfill ceased operations in December of 1968.⁵

Following hearings on the Wilderness Proposal⁶, Congress approved the Great Swamp Wilderness Area designation and President Johnson signed the bill on September 28, 1968.⁷ A few years later, in response to a request from the Township of Chatham regarding proper closure of the landfill portion of the Refuge, USFWS acknowledged that the landfill had not been properly closed, yet it did nothing to effectuate a proper closure, having decided instead “that nature should now be allowed to take its course.”⁸

³ See Deed from North American Wildlife Foundation to the United States (Feb. 28, 1964) (DOI 01604-14) (attached hereto as Attachment A).

⁴ See *id.* at DOI 01608 (providing a metes and bounds description of the area subject to continued landfill operations).

⁵ See, e.g., Deed from the North American Wildlife Foundation to the United States (Feb. 28, 1964) (transferring a portion of the Great Swamp subject to an easement expressly reserved by the Trust “for conducting sanitary landfill operations” until December 31, 1968); USFWS, Great Swamp National Wildlife Refuge Comprehensive Conservation Plan at 3-19 (Nov. 2014), available at <https://www.fws.gov/uploadedFiles/GRSFullCCP.pdf> [hereinafter “Great Swamp CCP”] (indicating that the landfill operated from the early 1930s through December 1968).

⁶ H.R. 16771: To Designate Certain Lands in the Great Swamp National Wildlife Refuge, Morris County, New Jersey, as Wilderness, Hearing in U.S. House of Representatives Subcomm. on Public Lands, 90 Cong. 2, 41 (1968); Great Swamp; Pelican Island; Monomoy; Seney, Huron, Michigan Islands, Gravel Island, Green Bay, and Moosehorn Wilderness Areas, Hearing Before the U.S. Senate Subcomm. on Public Lands, 90 Cong. 2 (1968) (S. 3379 Executive Communication, Recommendation of Wilderness Area designation from Secretary of Interior Stewart Udall).

⁷ See 82 Stat. 883 (Sept. 28, 1968).

⁸ Letter from Fish and Wildlife Service to Frank Kling, President, Board of Health, Township of Chatham at p.2 (May 16, 1975) [hereinafter “1975 USFWS Letter”] (attached hereto as Attachment B).

II. Existing Statutory Limitations Restrict Development on the Great Swamp National Wildlife Refuge

Development restrictions on the Refuge are sufficiently stringent that a deed notice is not required on the portion of the Rolling Knolls Landfill Superfund Site (the “Site”) located on the Refuge. Even without a deed notice, existing statutory and regulatory limitations restrict development on the Refuge portion of the Site. This portion of the Site, which is designated as a “Wilderness Area,” is administered by the USFWS pursuant to the requirements and restrictions of the National Wildlife Refuge System Administration Act of 1966, as later amended by the National Wildlife Refuge System Improvement Act of 1997 (collectively the “Refuge Act”)⁹, the Wilderness Act of 1964 (the “Wilderness Act”)¹⁰, and the Great Swamp Wilderness Act of 1968 (the “Great Swamp Wilderness Act”)¹¹. Additionally, USFWS manages the Refuge pursuant to the Great Swamp CCP, which is a publicly available document that describes “sources of contamination” on the Refuge, including from the Rolling Knolls Landfill.¹²

A. The Refuge Act

USFWS manages the entire Refuge, including the Wilderness Areas, pursuant to the Refuge Act, which provides “The mission of the [Refuge] System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.”¹³ Any development of the Site would be contrary to the mission of the Refuge. Consistent with this, in a 1975 letter to the Chatham Board of Health discussing the portion of the Site located on the Refuge, USFWS

⁹ 16 U.S.C. §§ 668dd-ee.

¹⁰ 16 U.S.C. § 1131(a).

¹¹ 82 Stat. 883 (Sept. 28, 1968).

¹² Great Swamp CCP at 1-1 and 3-19.

¹³ 16 U.S.C. § 668dd(a)(2).

stated unequivocally that “we will not attempt any further action to alter or develop these lands.”¹⁴

The Refuge Act also explicitly prohibits multiple activities that would likely be required to develop the Site without express authorization by other laws:

No person shall disturb, injure, cut, burn, remove, destroy, or possess any real or personal property of the United States, including natural growth, in any area of the System; or take or possess any . . . animals or part or nest or egg thereof within any such area; or enter, use, or otherwise occupy any such area for any purpose; unless such activities are performed by persons authorized to manage such area, or unless such activities are permitted either under subsection (d) or by express provision of the law, proclamation, Executive order, or public land order establishing the area, or amendment thereof¹⁵

Thus, the statute does not authorize destructive activities (e.g. activities that disturb, injure, cut, remove, or destroy Refuge System areas),¹⁶ absent the express provisions of a law, proclamation, executive order, or public land order establishing the area.¹⁷

Management of the Refuge is conducted pursuant to the Great Swamp CCP.¹⁸ The USFWS Manual requires the Service to manage refuges in accordance with approved CCPs, which set forth the “desired future conditions of a refuge or planning unit and provide[] long-range guidance and management direction to achieve the purposes of the refuge,” among other things, and are revised every fifteen years with public involvement.¹⁹ The Refuge’s most recent CCP, issued in 2014, includes a discussion and description of “sources of contamination” on the Refuge, including the Rolling Knolls Landfill as well as other sources.²⁰

¹⁴ 1975 USFWS Letter at 1.

¹⁵ 16 U.S.C. § 668dd(c).

¹⁶ See 16 U.S.C. § 668dd(d) (The heading for this section is “Use of areas; administration of migratory bird sanctuaries as game taking areas; rights of way, easements, and reservations; payment of fair market value”).

¹⁷ See 16 U.S.C. § 668dd(c).

¹⁸ See Great Swamp CCP at 1-1.

¹⁹ USFWS, *Refuge Planning Overview*, 602 FW 1, 1.6.E (June 21, 2000), available at <https://www.fws.gov/policy/602fw1.html>; USFWS, *Comprehensive Conservation Planning Process*, 602 FW 3, 3.2 (June 21, 2000), available at <https://www.fws.gov/policy/602fw3.html>.

²⁰ See Great Swamp CCP at 3-19.

B. The Wilderness Act

The Wilderness Act is even more restrictive than the Refuge Act. The Wilderness Act provides that Wilderness Areas:

shall be administered for the use and enjoyment of the American people in such manner as will leave them *unimpaired* for future use and enjoyment as *wilderness*, and so as to provide for the protection of these areas, the *preservation* of their *wilderness character*, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness.²¹

The use limitations set forth in the Wilderness Act preclude any future commercial or residential development of the portion of the Site on the Refuge.²²

The Wilderness Act also expressly prohibits within wilderness areas temporary roads, the use of motor vehicles, motorized equipment or motorboats, the landing of aircraft, the use of any mechanical transport, and structures or installations “*except as necessary to meet minimum requirements for the administration of the area for the purpose of this chapter (including measures required in emergencies involving the health and safety of persons within the area).*”²³ Given this single exception, courts have determined that these are the strictest prohibitions in the Wilderness Act.²⁴

The USFWS General Overview of Wilderness Stewardship Policy (“Wilderness Policy”) restates the criteria for the USFWS to authorize generally prohibited uses in wilderness areas, i.e., necessary to meet the minimum requirements for administration of wilderness areas, and further clarifies that USFWS “adhere[s] to a *much stricter standard* than usual for approving actions in wilderness so that we maintain the natural and untrammled condition of the wilderness.”²⁵ The process for making these findings is “a minimum requirement analysis

²¹ 16 U.S.C. § 1131(a) (emphasis added).

²² *Id.* (emphasis added).

²³ 16 U.S.C. § 1133(c) (emphasis added).

²⁴ See *Wilderness Watch*, 629 F.3d at 1040; *Californians for Alternatives to Toxics v. U.S.F.W.S.*, 814 F. Supp. 2d 992, 1016 (E.D. Cal. 2011).

²⁵ USFWS, *General Overview of Wilderness Stewardship Policy*, 610 FW 1, 1.17.B (Nov. 7, 2008) (emphasis added), available at <https://www.fws.gov/policy/610fw1.html>.

(MRA).”²⁶ The MRA addresses the need for and impacts of any proposed activity that involves a generally prohibited use.²⁷ USFWS “authorize[s] an activity only if we demonstrate that it is necessary to meet the minimum requirement for administering the area as wilderness and necessary to accomplish the purposes of the refuge, including Wilderness Act purposes.”²⁸

Deed notices are designed to limit the uses of property where contamination has not been remediated to unrestricted use standards.²⁹ The Wilderness Act imposes significantly more stringent use restrictions than a deed notice; thus, a deed notice on the Refuge portion of the Site will not provide any additional use or development restrictions not already provided by the Wilderness Act.

C. The Great Swamp Wilderness Act

The Great Swamp Wilderness Act expressly prohibits within the Wilderness Area commercial enterprise, temporary roads, the use of motor vehicles, motorized equipment or motorboats, the landing of aircraft, the use of any mechanical transport, and structures or installations “[e]xcept as necessary to meet minimum requirements in connection with the purpose for which the area is administered (including measures required in emergencies involving the health and safety of persons within the area).”³⁰ This language mirrors the prohibitions in the Wilderness Act.³¹ Accordingly, similar to the Wilderness Act, the Great Swamp Wilderness Act provides an additional layer of assurance that development will be restricted on the Refuge portion of the Site.

All three of these laws impose extensive land use restrictions that fundamentally guarantee that there will be no future development or land uses that would conflict with

²⁶ *Id.*

²⁷ *See id.*

²⁸ *Id.*

²⁹ See N.J.S.A. 58:10B-13 (a) (A deed notice is described by NJ State Legislature as a “...notice to inform prospective holders of an interest in the property that contamination exists on the property at a level that may statutorily restrict certain uses of, or access to, all or part of that property, a delineation of those restrictions, a description of all specific engineering or institutional controls at the property that exist and that shall be maintained in order to prevent exposure to contaminants remaining on the property, and the written consent to the notice by the owner of the property.”).

³⁰ Great Swamp Wilderness Act of 1968, 82 Stat. 883 (Sept. 28, 1968).

³¹ See 16 U.S.C. § 1133(c).

remediation to less than unrestricted use standards. Changing the Wilderness Area designation would be subject to Congressional approval. Accordingly, as the Site is already subject to stringent use restrictions, a deed notice is not required to ensure the Site is protected from future development or inconsistent land uses.

III. A Change in Ownership of the Site is Highly Unlikely

As indicated in the legislative history of the Industrial Site Recovery Act and as codified in the Brownfield and Contaminated Site Remediation Act at N.J.S.A. 58:10B-13(a), one of the main purposes of a deed notice is to provide notice to subsequent land owners, lessees, or operators of the conditions and restrictions on the Property.³² However, it is extremely unlikely that there will ever be any subsequent owner, lessee or operator of the portion of the Site on the Refuge.

First, the Refuge Act narrowly limits the sale or transfer of Refuge lands:

No acquired lands which are or become a part of the [Refuge] System may be transferred or otherwise disposed of under any provision of law (except by exchange pursuant to subsection (b)(3) of this section) unless (A) the Secretary determines with the approval of the Migratory Bird Conservation Commission that such lands are no longer needed for the purposes for which the System was established; and (B) such lands are transferred or otherwise disposed of for an amount not less than ... (ii) the fair market value of such lands (as determined by the Secretary as of the date of the transfer or disposal), in the case of lands of the System which were donated to the System.³³

Thus, DOI would need to determine that the Refuge is no longer needed “for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitat within the United States for the benefit of present and future generations of Americans”³⁴ and the Migratory Bird Conservation Commission would need to concur in that determination.

³² Sponsors Statement on Senate Bill No. 1070 at 37 (1992) (“This bill precludes the department from requiring a deed restriction on the property if the property is cleaned to a standard less than the most protective. Rather, notice to subsequent owners or operators will be provided by a deed notice.”).

³³ 16 U.S.C. § 668dd(a)(5).

³⁴ 16 U.S.C. § 668dd(a)(2).

The Wilderness Act provides further restrictions on the transfer of property designated as

Wilderness Area:

Any modification or adjustment of boundaries of any wilderness area shall be recommended by the appropriate Secretary after public notice of such proposal and public hearing or hearings as provided as subsection (d) of this section. The proposed modification or adjustment shall then be recommended with map and description thereof to the President. The President shall advise the United States Senate and the House of Representatives of his recommendations with respect to such modification or adjustment and such recommendation shall become effective only in the same manner as provided for in subsections (b) and (c) of this section.³⁵

Subsections (b) and (c) both provide that the President's recommendation "shall become effective only if so provided by an Act of Congress."³⁶ The mandatory public hearings would provide ample opportunity to publicize any restrictions on the future use of the Property. Further, a recommendation from the President and an act of Congress would be required to transfer the Refuge portion of the Site to new owners, making the transfer highly unlikely.

IV. The NJDEP Has Not Required a Deed Notice Elsewhere in the Refuge

The New Jersey Department of Environmental Protection ("NJDEP") has already accepted the concept that the development and transfer restrictions noted above are sufficiently stringent that a deed notice is not required in the Refuge, even if contamination is left in place above unrestricted use standards. Like the Site, Operational Unit 3 ("OU3") of the Asbestos Dump Site is a Superfund Site located in Harding Township, in the Wilderness Area of the Refuge.³⁷

NJDEP initially took the stance that any area where contamination will be left behind above the applicable soil cleanup criteria "will require the placement of a [Declaration of Environmental Restriction] on the deed for that property."³⁸ Notwithstanding this initial position,

³⁵ 16 U.S.C. §1132(e).

³⁶ E.g., 16 U.S.C § 1132(c).

³⁷ USFWS, Record of Decision for Operable Unit 3 of the Asbestos Dump Superfund Site (Sept. 8, 1998) at 3, Figure 2, available at <https://semspub.epa.gov/work/02/100064.pdf> [hereinafter "OU3 ROD"]. Please note that this link works best in Internet Explorer.

³⁸ OU3 ROD at 134. A "Declaration of Environmental Restriction" was the predecessor to what is now known as a Deed Notice.

NJDEP concurred with the final remedy selected in the OU3 Record of Decision (“OU3 ROD”), which did not explicitly include placing a deed notice on the property.³⁹ The selected remedy for OU3 included removal and off-site disposal of lead-impacted soils and drums containing chlorinated solvents and other organic wastes and sludges, capping remaining waste with a biotic barrier, construction of water diversion and long-term drainage improvements, and institutional controls (e.g. limiting visitor access to daylight hours and to passive activities like hiking, bird watching, and photography).⁴⁰ The remedy as implemented resulted in 1,200 tons of non-hazardous lead-contaminated soils and asbestos-containing materials (“ACM”) being left onsite.⁴¹

The OU3 ROD specifically noted that the selected remedy “would result in hazardous substances remaining on-site above health-based levels or ARARs.”⁴² Further, unlike other proposed alternatives such as Alternative 2, which specifically included “securing deed restrictions”⁴³ as part of the proposed institutional controls, the selected alternative did not include a deed notice in the discussion of the institutional “controls currently envisioned.”⁴⁴ Despite these facts, NJDEP concurred with selection of this remedy.⁴⁵

While the OU3 ROD did not expressly say whether a Deed Notice was required for the property, in a Five-Year Review of the Asbestos Dump Superfund Site from September 2000 (“2000 Five-Year Review”), EPA specifically stated “A deed notice is not required since OU-3 is located within a National Wildlife Refuge.”⁴⁶ There is no indication that NJDEP disagreed with this conclusion.

³⁹ OU3 ROD at 87-88. However, the Declaration of Statutory Determinations in the OU3 ROD stated “The site may also be subject to a Deed Notice to comply with NJDEP requirements.” OU3 ROD at 6.

⁴⁰ See USFWS, Draft Five-Year Review for Operable Unit 3 of the Asbestos Dump Superfund Site at 6 (2014), available at <https://semspub.epa.gov/work/02/351468.pdf> [hereinafter “2014 OU3 Five-Year Review”].

⁴¹ See 2014 OU3 Five-Year Review at 9.

⁴² OU3 ROD at 39.

⁴³ OU3 ROD at 36.

⁴⁴ OU3 ROD at 39.

⁴⁵ OU3 ROD at 87-88.

⁴⁶ US Environmental Protection Agency, Five-Year Review Report for the Asbestos Dump Site (Sept. 2000) at 6, available at <https://semspub.epa.gov/work/02/139641.pdf> [hereinafter “2000 OU3 Five-Year Review”].

Indeed, EPA involved NJDEP in the assessment of the effectiveness of the OU3 remedy for inclusion in the 2000 Five-Year Review. Unlike OU1 and OU2 of the Asbestos Dump Site where Managers from EPA and the US Army Corps of Engineers (“USACE”) conducted the site inspections, NJDEP participated in the site inspection for OU3. The 2000 Five-Year Review states:

On May 18, 1999, the representatives from EPA, DOI *and* NJDEP conducted a site inspection of OU-3. The purpose of the site inspections was to determine the current status of the Site and the adequacy of the Site cleanup.⁴⁷

NJDEP had ample opportunity during this site inspection to voice concerns with the selected remedy or the need for a deed notice. Yet after conducting the site inspection with NJDEP personnel present, EPA concluded that the selected remedy remained protective of human health and the environment,⁴⁸ and that a deed notice was not required.⁴⁹

NJDEP was also involved in the Site Inspection performed in connection with the fourth Five-Year Review for OU3.⁵⁰ The 2014 Five-Year Review explicitly acknowledged that development on the property is restricted, stating:

As part of a National Wilderness Area, and more generally as part of the GSNWR, the remediated OU3 area is protected from development or future land uses that might potentially conflict with the remedial design. Any changes to this designation would be subject to Congressional approval. As such, the land will be managed in perpetuity as wildlife habitat with very limited public use and access insofar as these activities are consistent and compatible with Operation and Maintenance (O&M) actions that have been established for the site.⁵¹

Finally, in concurring with the removal of the Asbestos Dump Superfund Site (which includes OU3) from the National Priorities List (“NPL”), the NJDEP effectively endorsed the conclusion that a deed notice was not required for OU3.⁵² The Oil and Hazardous Substances

⁴⁷ 2000 OU3 Five-Year Review at 6 (emphasis added).

⁴⁸ 2000 OU3 Five-Year Review at 6-7.

⁴⁹ 2000 OU3 Five-Year Review at 6.

⁵⁰ 2014 OU3 Five-Year Review at 18.

⁵¹ 2014 OU3 Five-Year Review at 10.

⁵² Letter from Irene Kropp, New Jersey Department of Environmental Protection to Walter Mugdan, US Environmental Protection Agency at p.1 (Feb. 19, 2009) (attached hereto as Attachment C) ; Notice of Deletion of

Pollution Contingency Plan (“NCP”) specifies that a site may be deleted from the NPL if “all appropriate responsible parties or other persons have implemented *all appropriate response actions required*” or “all appropriate Fund-financed response under CERCLA has been implemented, and no further response action by responsible parties is appropriate.”⁵³ While contamination was left in place above ARARs at OU3, there is no indication a deed notice was ever put in place at OU3.⁵⁴ Accordingly, NJDEP’s agreement that the criteria for removal from the NPL had been satisfied without a deed notice indicates that NJDEP did not believe a deed notice was an “appropriate response action required,” even though contamination remained in place above NJDEP standards.⁵⁵

IV. Conclusion

For all of these reasons, even if contamination is left in place on the Refuge at levels higher than the NJDEP’s unrestricted use standards, a deed notice is not required to be placed on the Refuge. The public is on notice of such contamination pursuant to the Great Swamp CCP, and direct human contact related to future development is not a concern given the statutory mission to manage the Refuge as preserved wilderness area in perpetuity and the substantial limitations on transfer of the property.

the Asbestos Dump Superfund Site from the National Priorities List, 75 Fed. Reg. 26136 (May 11, 2010), available at <https://www.govinfo.gov/content/pkg/FR-2010-05-11/pdf/2010-10849.pdf>.

⁵³ 40 CFR 300.425(e)(1) (emphasis added).

⁵⁴ See US Environmental Protection Agency, Superfund Final Site Closeout Report, Asbestos Dump Site (Nov. 2009) at 15 (attached hereto as Attachment D). The “OU3 institutional controls include the following: 1) restricted access via a gated road; 2) posted signs indicating closed areas; 3) law enforcement presence; 4) altered trail system to divert people from the landfill area; and 5) periodic inspections.” *Id.*

⁵⁵ See Notice of Deletion of the Asbestos Dump Superfund Site from the National Priorities List, 75 Fed. Reg. 26136 (May 11, 2010).

Attachment A

Deed from North American Wildlife Foundation to the
United States (Feb. 28, 1964)

This Indenture,

Made the - 28th - day of February, in the year of our Lord
One Thousand Nine Hundred and Sixty-four.

Between NORTH AMERICAN WILDLIFE FOUNDATION, incorporated under
the laws of the District of Columbia and having its principal office in
the Wire Building,

in the City of Washington, ~~County~~ District of Columbia,
~~and~~ party of the first part;

And

UNITED STATES OF AMERICA

~~and~~ party of the second part;

Witnesseth, That the said party of the first part, for and in consideration
- - - One Dollar and other good and valuable considerations - - -
lawful money of the United States of America, to it in hand well and truly paid by the said
party of the second part, at or before the sealing and delivery of these presents, the receipt whereof is
hereby acknowledged, and the said party of the first part being therewith fully satisfied, contented and
paid, has given, granted, bargained, sold, aliened, released, enfeoffed, conveyed and confirmed and by
these presents does give, grant, bargain, sell, alien, release, enfeoff, convey and confirm unto the said
party of the second part, and to its successors
and assigns, forever,

All that certain
tract or parcel of land and premises, hereinafter particularly described, situate, lying and being
in the Township of Chatham, County of Morris
and State of New Jersey:

BEGINNING at a point which is distant 1,030 feet northeasterly
along a bearing of North 69 degrees 00 minutes East from the intersection
of the termination of the 11th Course and the commencement of the 12th
Course in a Deed from Charles Oswald to Angelo J. Miele dated August 27,
1935 and recorded in the Morris County Clerk's Office on August 29, 1935
in Book E-34 of Deeds for said County at pages 82 &c. and running thence
(1) North 69 degrees 00 minutes East along the 12th, 13th and 14th
Courses in said Oswald Deed approximately 2,370 feet to the corner which
is the termination of the 14th Course and the commencement of the 15th
Course in said Oswald Deed; thence (2) North 46 degrees 00 minutes West
along the 15th Course in said Oswald Deed approximately 955 feet to a
point where said 15th Course is intersected by a line drawn parallel to
and at a distance of 150 feet northwest of the center line of Black
Brook Channel as it existed in June, 1963, said line being drawn in a
southwesterly direction and constituting the next course in the present
Deed; thence (3) in a southwesterly direction along the line drawn
parallel to and at a distance of 150 feet northwest of the center line
of Black Brook Channel as it existed in June, 1963, (this line is the
3rd Course in the Deed dated June 21, 1963 from Angelina Miele and
Anthony P. Miele as Executors and Trustees under the Last Will and
Testament of Angelo J. Miele, Deceased, et al., to Township of Chatham

BOOK 1897 PAGE 76

DBK 1897-76

R: 03-05-64

RECEIVED
MAR 5 1 06 PM '64
MORRIS COUNTY CLERK

No
REVENUE STAMPS
ON DEED

in the County of Morris, recorded on June 27, 1963 in the Morris County Clerk's Office in Book 1872 of Deeds for said County at pages 447 &c) approximately 2,010 feet to a point where this line would be intersected by a line drawn northwesterly at right angles to the 1st Course of the present Deed from the beginning point hereof; thence (4) South 21 degrees 00 minutes East along said line drawn at right angles to the 1st Course of the present Deed and crossing the aforesaid Black Brook Channel a distance of approximately 590 feet to the point and place of BEGINNING.

Containing 35 acres of land, be the same more or less.

Being the same premises conveyed to North American Wildlife Foundation by the Township of Chatham in the County of Morris, by deed dated February 7, 1964 and recorded in Book 1895 of Deeds, pages 339 &c.

Said premises are conveyed subject to the surface and storm water drainage easement reserved by the Township of Chatham in the County of Morris in said deed.

Said premises are also conveyed subject to the following limitation contained in the above mentioned deed from the Township of Chatham in the County of Morris:

"Title to the premises hereby conveyed shall remain vested in North American Wildlife Foundation, its successors and assigns, so long as said premises are used solely for wildlife conservation purposes, and if said premises or any portion thereof shall at any time be used for any other purpose title to all of said premises shall thereupon revert to and become vested in the Township of Chatham in the County of Morris, its successors and assigns. The use by the Township of Chatham in the County of Morris, its successors or assigns, of the surface and storm water drainage easement herein reserved shall not constitute a violation of this covenant and restriction."

Together with all and singular the houses, buildings, trees, ways, waters, profits, privileges, and advantages, with the appurtenances to the same belonging or in anywise appertaining:

Also, all the estate, right, title, interest, property, claim and demand whatsoever, of the said party of the first part, of, in and to the same, and of, in and to every part and parcel thereof,

To have and to hold all and singular the above described land and premises, with the appurtenances, unto the said party of the second part, its successors ~~heirs~~ and assigns, to the only proper use, benefit and behoof of the said party of the second part, its successors ~~heirs~~ and assigns forever:

This conveyance is subject to a right of reversion retained by the Grantor herein in the event the United States of America should cease to use the land hereby conveyed for wildlife conservation purposes.

And the said NORTH AMERICAN WILDLIFE FOUNDATION

for itself, its successors ~~heirs~~, executors and administrators, does covenant, promise and agree to and with the said party of the second part, its successors and assigns that it has not made, done, committed, executed or suffered any act or acts, thing or things whatsoever, whereby or by means whereof the above mentioned and described premises, or any part or parcel thereof, now are, or at any time hereafter shall or may be impeached, charged or encumbered, in any manner or way whatsoever.

In Witness Whereof, the party of the first part has set hand and seal or caused these presents to be signed by its proper corporate officers and caused its proper corporate seal to be hereunto affixed, the day and year first above written.



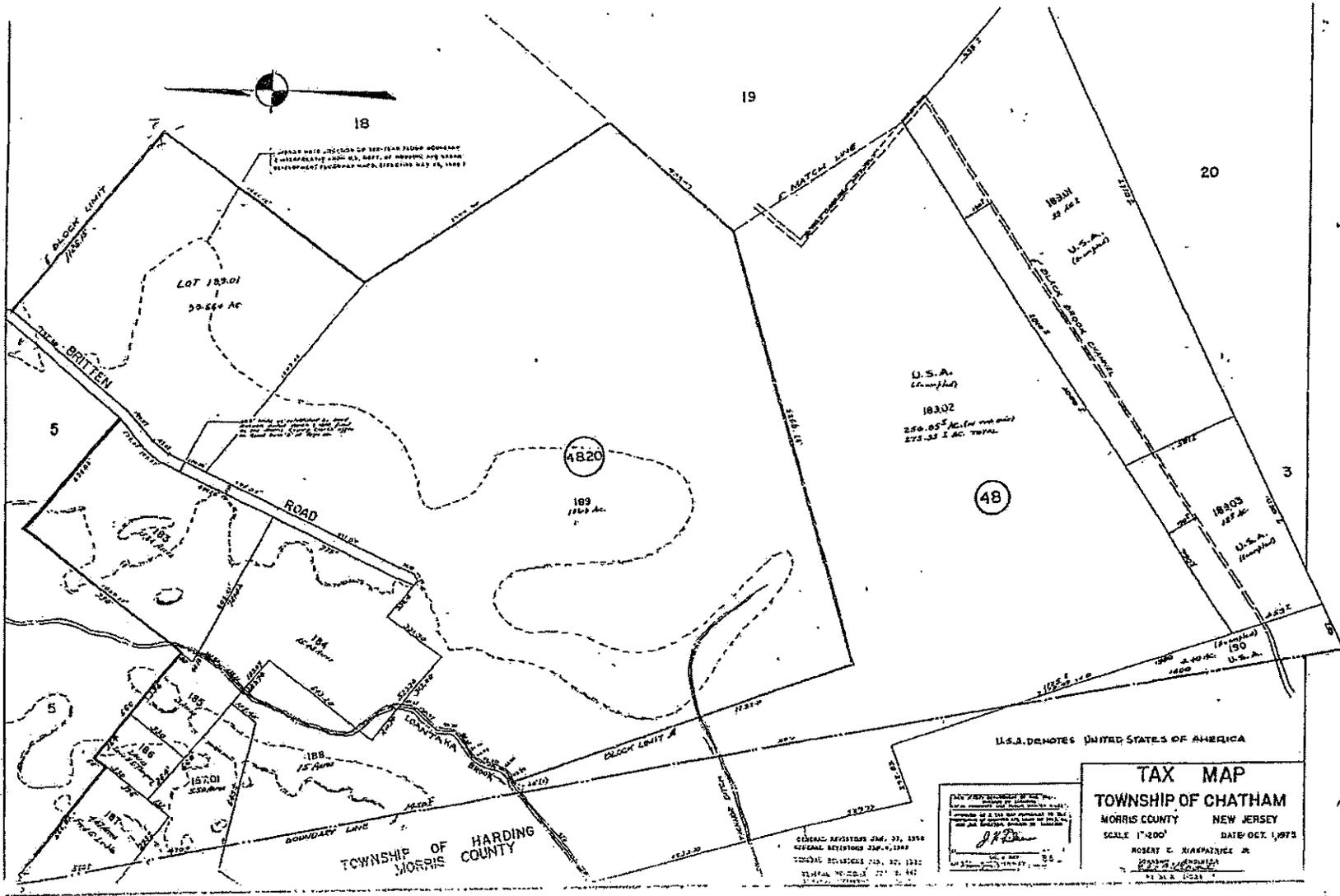
NORTH AMERICAN WILDLIFE FOUNDATION

By Max McGrath
Max McGrath President

C. E. Gutermonth
C. E. Gutermonth Secretary

Consideration less than \$100.00. No revenue stamps required.

500A1897VALE 78



Ref. 189.01-10

Attachment B

Letter from Fish and Wildlife Service to Frank Kling, President,
Board of Health, Township of Chatham (May 16, 1975)

Copy to Bd. of Health and Attt. Miller 5/23/75



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Post Office and Courthouse Building
BOSTON, MASSACHUSETTS 02109

MAY 16 1975

Mr. Frank Kling, President
Board of Health
Township of Chatham
24 Southern Boulevard
Chatham, New Jersey 07928

Dear Mr. Kling:

In answer to your letter of January 14th regarding the disposition of the governments deliberations over the Miele dump, I am sorry that we failed to respond to your former request. Although acquisition considerations continued into 1972, we are no longer considering any additional acquisitions in the vicinity of Miele's dump, or within Chatham Township. The government did not acquire an additional acreage from the Miele estate after the closing of the sanitary landfill in 1968. The current refuge boundary will stand.

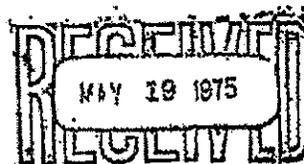
We are well aware that the Miele dump was not covered in accordance with state regulations and the Chatham Township landfill ordinance. Our small peripheral holdings on the south and east sides of the dump remain uncovered. Approximately two acres on the easterly side were involved in the July, 1974 fire, the remainder (some 12-14 acres) were on Mr. Miele's property. The fire originated off-refuge, presumably caused by spontaneous combustion within the dump. A two-foot cover of earth might have smothered the fire. However, at this late date, we do not anticipate taking any legal action. If the township should decide to do so, such is your prerogative.

Since the landfill section acquired by the government as a buffer now lies within the designated boundary of the Great Swamp Wilderness Area, we will not attempt any further action to alter or develop these lands. Access would first necessitate the covering of Mr. Miele's landfill, an extremely expensive undertaking at this point in time. It would also require special exception to the Wilderness Preservation Act.



Save Energy and You Serve America!

TOC 00534



As time passes, decomposition progresses and the threat of fire on the open dumplands diminishes. Granted, it remains an eyesore. However, despite the lack of an earthen cover, the process of re-vegetation had begun prior to the fire. This process should accelerate on the burnt-over portions of the site. Covering the periphery of the landfill now might cause more damage than leaving it alone. Spacial considerations would also have to be given to erosion control, due to the adjoining marshlands and slope. Much of the dumpland within the wilderness has sloughed to marsh level or has become subaqueous because of past decomposition and erosion.

Currently, our major concern is caused by the lateral leaching of pollutants into the Wilderness Area. As with other past refuge dump sites, we continue to monitor the effects of such wastes. But the damage has been done and both man and wildlife will continue to suffer the consequences. Although wildlife in the immediate environs are in direct jeopardy as a result of potentially lethal drainages, the swampland functions as a filter lessening the threat to human populations downstream. It is our contention and commitment that nature should now be allowed to take its course. The damage is irreversible and unrepairable, except by time.

Sincerely yours,

Richard E. Griffel
Regional Director

Attachment C

Letter from Irene Kropp, New Jersey Department of
Environmental Protection to Walter Mugdan, US Environmental
Protection Agency (Feb. 19, 2009)



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

JON S. CORZINE
Governor

MARK N. MAURIELLO
Acting Commissioner

FEB 19 2009

Mr. Walter Mugdan, Director
Emergency and Remedial Response Division
United States Environmental Protection Agency
Region II
290 Broadway
New York, New York 1007-1866

Re: Deletion of Asbestos Dump Superfund Site

Dear Mr. Mugdan:

I am writing in regards to the U.S. Environmental Protection Agency's (EPA) Notice of Intent to Delete the Asbestos Dump Superfund Site from the National Priorities List.

The New Jersey Department of Environmental Protection (DEP) concurs with EPA's decision to proceed with the deletion of the Asbestos Dump Superfund Site located in Long Hill Township, Morris County. DEP finds that remedial work completed at the sites three Operable Units is consistent with Record of Decisions signed for the site in 1988, 1991 and 1998. Also, restoration is complete for all individual properties associated with the site and operation and maintenance is underway.

If you have any questions or would like to discuss these issues in further detail, please contact Edward Putnam, Assistant Director of the Publicly Funded Remediation Element, at (609) 984-3074.

Sincerely,

Irene Kropp
Assistant Commissioner
Site Remediation Program

c: Ed Putnam, Assistant Director, Publicly Funded Remediation Element, DEP
Carole Petersen, Chief, NJ Remedial Action Branch, EPA Region II

Attachment D

US Environmental Protection Agency, Superfund Final Site
Closeout Report, Asbestos Dump Site (Nov. 2009)

SUPERFUND FINAL SITE CLOSE OUT REPORT
ASBESTOS DUMP SITE
MEYERSVILLE, MORRIS COUNTY, NEW JERSEY



November 2009

Prepared by

U.S. Environmental Protection Agency, Region II
290 Broadway
New York, New York 10007

I. INTRODUCTION

This Final Close Out Report documents that the U. S. Environmental Protection Agency (EPA) has completed all response actions for the Asbestos Dump Site in accordance with *Close Out Procedures for National Priorities List Sites* (OSWER Directive 9320.2-09A-P, January 2000).

The Asbestos Dump Site (Site) consists of four separate properties which were addressed in three discrete operable units (OUs). OU1 consists of the Millington site, located in Millington, New Jersey. OU2 consists of the New Vernon Road and White Bridge Road "satellite" sites, both of which are located in Meyersville, New Jersey. OU3 consists of the third satellite site, known as the Dietzman Tract, which is located in Harding Township, New Jersey. The Site was placed on the National Priorities List (NPL) in September 1983.

A Remedial Investigation (RI) for the Site was conducted by the National Gypsum Company (NGC), the Potentially Responsible Party (PRP), between 1986 and 1987. The RI sufficiently delineated the nature and extent of contamination for OU1; however, EPA determined that additional investigations were needed to complete the characterization of contamination for OU2 and OU3. Subsequent RI activities for OU2 were conducted by EPA and completed in 1991. OU3 RI activities were conducted by the U.S. Fish and Wildlife Service (FWS) and completed in 1997. Records of Decisions (RODs) for each of the three operable units, OU1, OU2 and OU3, were signed in September 1988, September 1991 and September 1998, respectively. The selected remedy for OU1 included the installation of a soil cover, slope stabilization, monitoring and implementation of institutional controls. The remedy for OU2 consisted of the solidification/stabilization of asbestos-contaminated soils at the New Vernon Road and White Bridge Road sites along with monitoring and implementation of institutional controls. The OU3 remedy consisted of removal and off-site disposal of non-asbestos-containing contaminated materials, consolidation and capping of asbestos-containing materials, and implementation of institutional controls.

Remedial actions for the Site were completed by the year 2000. As a result of these actions, cleanup levels protective of human health and the environment have been achieved for the Site.

Given the nature of this Site, the Final Close Out Report will summarize the history, remedies and remedial actions taken for each individual OU.

II. SUMMARY OF SITE CONDITIONS

Background

Manufacturing of asbestos-containing material (ACM) began at the Millington site in 1927 by Asbestos, Ltd., which engaged in the fiberization and sale of asbestos until 1946. While the property had changed ownership over the years, ACM continued to be produced until 1975 when the plant was closed by NGC, the owner at the time. During the period in which the asbestos manufacturing facility was in operation, asbestos-containing waste had been disposed of on the Millington site. When the Millington site had reached its capacity for on-site disposal,

asbestos-containing waste materials were disposed of off-site at the New Vernon Road, White Bridge Road, and the Dietzman Tract sites.

Background - Operable Unit One

OUI consists of the Millington site which is an 11-acre commercial property located at 50 Division Avenue in Millington, New Jersey. The site is bounded on the west by the Passaic River, on the north by the Millington Train Station, and on the east and south by commercial and private residences, respectively. Currently owned by Tifa Ltd., this parcel was formerly utilized as an asbestos processing plant that had several previous owners. Manufacturing of asbestos products at the Millington site began in 1927 by Asbestos Ltd., which engaged in the fiberization and sale of asbestos until 1946. From 1946 until 1953, the plant was owned and operated by Smith Asbestos, Inc., a manufacturer of asbestos roofing and siding. During this later period, asbestos sediment from water settling ponds was disposed of on-site.

In May 1953, the property was acquired by NGC, which manufactured cement asbestos siding and roofing sheets at the plant until 1975. During this period, waste products, consisting of broken siding and asbestos fibers were dumped on a five-acre area of the property. This included a 330 by 75-foot area (later referred to as the asbestos mound) where predominantly asbestos fibers were disposed. It is estimated that 90,000 cubic yards of asbestos waste were disposed of on-site.

Background - Operable Unit Two

OU2 includes the New Vernon Road and White Bridge Road sites. The OU2 New Vernon Road site is located at 237 New Vernon Road in Meyersville, Long Hill Township, Morris County, New Jersey. It consists of approximately 30 acres of land and is currently bounded by the Great Swamp National Wildlife Refuge (GSNWR) to the north, tracts of wooded and wetland areas to the east and south, and New Vernon Road to the west. The property previously included two residences and a large garage structure.

From 1945 through 1980, the privately owned New Vernon Road site was used for farming. From 1968 to 1971, ACM generated by NGC, including asbestos fibers, broken asbestos tiles, and siding, was deposited throughout the site. Large amounts of ACM were deposited in the central portion of the property in a large depression. Asbestos had also been detected in other areas of the property.

In 1998, the government acquired the New Vernon Road site from the residential owners. In January 2002, EPA, the New Jersey Department of Environmental Protection (NJDEP) and the FWS reached an agreement on the terms of the transfer of a portion of the New Vernon Road site to the FWS to expand the GSNWR. In September 2002, an approximate 25-acre portion of the New Vernon Road site was formally transferred to the FWS and is now part of the GSNWR. The remaining five-acre portion, which contains the area of solidified asbestos-containing material, was transferred to the State of New Jersey.

The White Bridge Road site is located at 651 White Bridge Road in Long Hill Township, NJ. It is approximately two miles away from the New Vernon Road site and consists of approximately 12 acres of land, as well as adjoining property, which is part of the GSNWR, in Meyersville, New Jersey. The site is bounded by White Bridge Road to the north, the GSNWR to the east and southeast, Black Brook to the southwest, and a wooded lot to the west. One private residence, including a two-story home, garage, two sheds and three stables, is currently located on the site. The property also includes a series of fenced-in grazing fields.

From 1945 through 1969, the White Bridge Road site had been used for farming. In 1970, the property was purchased by the current residents. From 1970 to 1975, ACM, including asbestos tiles and siding from the NGC, was disposed of on the property. Subsequent to these disposal activities, the current owner converted the property into a horse farm with stables, a horse riding track, and grazing fields. The horse riding track was comprised of large amounts of ACM mixed with soils. ACM had also been detected in other areas of the site.

The remedy for the White Bridge Road portion of OU2 was completed and this portion of the site was deleted from the NPL in February 2002.

Background - Operable Unit Three

OU3 consists of the former Dietzman Tract which is a seven-acre parcel of land located in GSNWR, about two miles southeast of the New Vernon Road portion of the site. The GSNWR, currently owned by the FWS, covers approximately 7,400 acres of swamp, wooded, and wetland areas. The refuge is managed by FWS for a wildlife habitat and for recreational purposes. In addition to 185,000 annual visitors, there are approximately 440 residents of the neighboring community within a one-mile radius of OU3. The Dietzman Tract included the following four discrete areas: 1) Site A - a five-acre asbestos-contaminated dump; 2) Site B - a half-acre dump consisting of refuse and covered with ACM; 3) Unimproved Access Road (UAR) - a road surfaced with ACM which leads to Site A and Site B; and 4) three small refuse areas adjoining Site B (Refuse Areas #1, 3 and 6).

The above-mentioned four discrete areas of OU3 were used for the disposal of refuse collected from neighboring communities. Along with refuse, ACM and other industrial wastes from the NGC plant in Millington were trucked to the OU3 site for disposal. The disposal of ACM began in 1959 and ended in 1968 when the FWS acquired the property. Approximately 40,000 cubic yards of ACM and refuse were delineated at OU3.

Remedial Investigation/Feasibility Study (RI/FS)

In April 1985, EPA issued an Administrative Order to NGC to conduct the RI/FS at the four properties comprising the Site. NGC performed RI activities in 1986 and 1987 (hereinafter referred to as the NGC RI). EPA performed oversight of these activities. In May 1987, the RI report was submitted to EPA. Upon review, EPA determined that while the NGC RI had adequately characterized contamination at the Millington site, the RI failed to adequately characterize the nature and extent of contamination at the New Vernon Road, White Bridge

Road and Dietzman Tract sites.

In August 1990, EPA collected and analyzed soil and dust samples at the New Vernon Road and White Bridge Road sites. Contrary to data reported in NGC's RI report, high levels of asbestos were detected. EPA determined that an immediate removal action was necessary to address the imminent threat posed by the sites.

During removal activities in 1990, EPA initiated a RI/FS at the New Vernon Road and White Bridge Road OU2 sites to supplement the NGC RI and fully characterize the nature and extent of asbestos contamination. Field work was completed in the fall of 1990 and the RI and FS reports were completed in June 1991. FWS initiated a RI/FS in 1996 for the OU3 Dietzman Tract to fill the data gaps from the NGC RI. The supplemental RI/FS for OU3 was completed in 1997.

RI/FS - Operable Unit One

RI/FS activities were initiated by NGC in 1986 and completed in 1987. The primary contaminant of concern was asbestos. Soil borings and historical information revealed that the upland portion of site contained broken asbestos tiles and siding, while the asbestos mound was found to contain predominantly asbestos fibers. The upland and asbestos mound portions of the site were covered with varying thicknesses of topsoil; however, exposed areas of asbestos fibers were observed on the slope of the asbestos mound adjacent to the Passaic River. The asbestos mound was heavily vegetated with thick underbrush and deciduous trees. Extensive slope stability analyses indicated that the asbestos mound was relatively stable; however, the slope was unprotected from surface erosion and the potential destabilizing effects of flooding along the Passaic River. Analysis of groundwater samples revealed low concentrations of mercury and asbestos related to disposal activities at the site. Mercury was detected in groundwater at concentrations exceeding drinking water standards in a limited number of samples; however, the limited mercury contamination remained within the footprint of the landfill and did not pose an unacceptable human health risk. As a result, groundwater alternatives were not evaluated. Asbestos was detected at concentrations substantially below the still proposed EPA drinking water standard. The RI and FS reports were completed in September 1988.

RI/FS - Operable Unit Two

EPA initiated a RI/FS in the fall of 1990 to supplement the NGC RI and to fully characterize the extent of asbestos contamination. The RI included a hydrogeological investigation, extensive sampling and subsequent laboratory analysis of subsurface soils, sediments, surface water, groundwater, potable water and air. The data indicated the presence of elevated levels of asbestos in the soil at both the New Vernon Road and White Bridge Road residential properties. With respect to groundwater, sampling results indicated that asbestos was not detected at levels above the analytical detection limit for all groundwater samples analyzed. Asbestos was determined to be present in the air at both OU2 sites as a result of soil contamination. EPA determined that an immediate removal action was necessary to address the imminent threat

posed by the contamination. Removal activities were conducted in the fall of 1990 to temporarily reduce the potential for airborne asbestos fibers and to restrict access. Removal activities included installation of fences, air and soil sample collection, decontamination of the residences, and visual inspection of ACM. RI field work was completed in 1990, and the RI and FS reports were completed in June 1991.

RI/FS - Operable Unit Three

The supplemental RI, known as the Phase II RI, for OU3 was needed to fill data gaps remaining from prior investigations to characterize the nature and extent of contamination at OU3. Another goal of the Phase II RI was to collect geotechnical data for evaluation of remedial alternatives in the FS. RI activities included, but were not limited to, the following: 1) characterization of the organic and inorganic contaminants and asbestos in the site media; 2) sampling of groundwater from 15 monitoring wells; 3) sampling of surface water; and 4) excavation of drums from Site A.

Early Phase II RI field activities commenced in January 1996. Removal actions were conducted in Fall of 1996 and air quality monitoring was completed in December 1996. The Phase II RI report was completed and submitted to EPA in 1997. The report indicated that OU3 was found to contain approximately 36,800 cubic yards of ACM, 3,800 cubic yards of refuse debris, an estimated 207 buried drums at Site A, and areas of metal-impacted soil and ACM. Buried drums located at Site A were removed in September 1997. FWS completed its FS report in 1997 which outlined general response actions that would satisfy the remedial action objectives for OU3 and recommend a remedy. FWS commissioned an independent value engineering study of the FS report which validated its findings, conclusions and recommendations.

Record of Decision (ROD)

The cleanup goal for the Site was to contain the migration of asbestos. For OU1 and OU3, asbestos-containing material was consolidated into the respective landfill areas for each OU and then capped. For OU2, the asbestos-containing material (having greater than 0.5% asbestos, which is the Transmission Electron Microscopy analytical method detection limit) was consolidated into one area, solidified and then capped.

On-site ambient air monitoring was conducted during the RI. For OU1, OU2 and OU3, almost all samples from several rounds of air monitoring had results less than the 0.1 fibers/cc standard. There were a few samples slightly above the 0.01 fibers/cc standard; however, the human health risk assessment concluded that there was no significant human health risk posed by airborne asbestos. Again, to mitigate potential future risks, the remediation goal for the site involved the capping of asbestos-containing material since this material could be a potential source of airborne asbestos.

ROD - Operable Unit One

On September 30, 1988, EPA issued a ROD for OUI. The major components of the selected remedy include the following: 1) installation of a two-foot soil cover on areas of exposed or minimally covered asbestos; 2) installation of a chain-link security fence to restrict access to the asbestos mound; 3) construction of slope protection/stabilization measures along the asbestos mound embankment; 4) construction of surface runoff diversion channels on top of the asbestos mound; 5) operation and maintenance of the remedy; 6) long-term monitoring; 7) institutional controls to restrict on-site groundwater usage and limit development on the asbestos fill areas; and 8) treatability studies of technologies for permanent destruction or immobilization of asbestos.

ROD - Operable Unit Two

On September 27, 1991, EPA issued a ROD documenting the Remedial Actions (RAs) for OU2. The ROD documented the remedial actions for both the New Vernon Road property and the White Bridge Road property. The major components of the selected remedy include the following: 1) in-situ solidification/stabilization of asbestos-contaminated soils; 2) appropriate environmental monitoring to confirm the effectiveness of the remedy; and 3) implementation of institutional controls to restrict future subsurface activities and assure the integrity of the treated waste.

EPA issued an Explanation of Significant Differences (ESD) on October 20, 1993 to modify the remedy specified in the OU2 ROD. TRC and TAMS Consultants, Inc. initiated the Remedial Design (RD) in 1991 under contract with EPA and performed a solidification/stabilization treatability study as part of the RD. Based upon the results of the treatability study, the solidification/stabilization depth was changed prior to the issuance of the Final Design Report in January 1993 to require that the solidified/stabilized mass be constructed above the groundwater table.

ROD - Operable Unit Three

On September 8, 1998, EPA issued a ROD for OU3. The major components of the selected remedy include the following: 1) access improvements; 2) long-term drainage improvements, and short-term erosion control measures; 3) drum removal activities (which were completed in September 1997 as a time-critical, non-emergency removal prior to implementation of the preferred alternative), including post-excavation and waste classification sampling; 4) removal and off-site disposal of soils with lead concentrations greater than 218 milligrams per kilogram (mg/kg) (completed, Spring 1998); 5) consolidation of Site B ACM into Site A (completed, Spring 1998); 6) placement of a biotic cover over Site A; 7) implementation of institutional controls to ensure the continued integrity of the drainage and cover activities; and 8) assessment of wetland impacts and wetlands restoration.

Remedy Implementation

Remedy Implementation - Operable Unit One

OUI remedial action activities were conducted pursuant to the 1988 ROD. The U.S. Army Corps of Engineers (USACE) provided oversight during all remedial activities. USACE contracted with IT Corporation (IT) to complete the remedial actions in accordance with the contract documents and all applicable state and federal regulations.

Mobilization activities began on June 17, 1999 and included the delivery of general materials, initiation of soil erosion and sediment control measures, and clearing and grubbing activities. The primary remedial construction activities included, but were not limited to, access road construction, retaining wall construction for slope stabilization, and cap construction operations. These construction activities included movement of contaminated soil, intrusion of surface soil, construction of drainage channels, and on-site relocation of ACM.

IT graded and compacted the north, south, and east roadways for improved access to the site. Access road construction activities for the south access road began on July 8, 1999. The retaining wall was installed at the toe of the asbestos mound for stabilization purposes. The wall is on average ten feet in height and 516 feet long. Work activities associated with the installation of the retaining wall began on July 26, 1999 and were completed on May 15, 2000. An access path was installed between the base of the wall and the edge of the Passaic River to allow for access during operations and maintenance activities. Work activities associated with the access path were completed on November 12, 1999.

Surface water runoff controls consisted of the construction of drainage channels and the installation of drains to divert runoff from the asbestos mound. Drainage construction controls were initiated on August 10, 1999 and were completed on December 22, 1999.

Asbestos-contaminated material was relocated from the toe of the asbestos mound to the on-site disposal area. Relocation activities were started on July 13, 1999 and were completed on November 23, 1999. Upon completion of the relocation activities, IT graded the asbestos mound and disposal area in preparation for cap construction activities.

Capping activities, which began on August 16, 1999, included, but were not limited to, closing the asbestos mound, relocating excavated material, grading the ACM to the required elevations, installation of a geotextile and geogrid material, and the placement and grading of a two-foot soil cover. On sloped surfaces, the cap consisted of a four-inch layer of crushed stone, followed by geotextile fabric, geogrid, a second layer of crushed stone, structural fill material, and topsoil. On level surfaces, the cap consists of a layer of controlled fill, geotextile fabric, embedded portion of the geogrid, a second layer of controlled fill, and topsoil. Capping material was compacted in accordance with the specification requirements.

Upon completion of the cap construction activities, IT performed site restoration and project close out activities. Site restoration included final site grading, drainage ditch construction, placement of topsoil, landscaping and planting, a final verification survey, site maintenance and cleanup, and demobilization of all temporary facilities and utilities. Site restoration activities were initiated on April 1, 2000 and were concluded on May 15, 2000. In April 2000, a final

inspection was conducted by EPA, USACE and IT. The purpose of the inspection was to ensure that the work activities were completed in accordance with the project specifications. As part of the final site inspection, EPA and NJDEP determined that the remedy was operational and functional.

In September 2001, EPA approved the Final RA Report as well as the 30-Year Operations and Maintenance (O&M) Plan. NJDEP is currently responsible for operation and maintenance activities. The O&M Plan documents the installation of a six-foot high chain link security fence with surrounds the site on its north, east and south limits. A double swing gate is located on the northeastern corner of the site which provides access to the OU1 site. Furthermore, the O&M Plan specifies that periodic inspections are conducted of all OUI design components including the retaining wall, perimeter access fence, capped area, and mowing/pruning of the ACM cover and surrounding areas. Monitoring of surface water and sediment sampling of the Passaic River, along with groundwater monitoring performed in accordance with the New Jersey landfill closure requirements and the Sampling and Analysis Plan, are included in the O&M Plan. Currently, groundwater, surface water and sediment sampling is conducted once every five years.

In addition to O&M activities, the OUI site is protected by institutional controls. A Deed Notice was filed by Tifa Realty, Inc., in the Morris County, New Jersey, Office of the County Clerk, on September 8, 2008 for the OUI Millington property designated as Block 12301, Lot 1 on the Long Hill Township tax map. The Deed Notice has been filed in Deed Book 21152, Page 508. The Millington property consists of approximately 11 acres, with the restricted area comprising approximately five acres. The landfill, which is located on the five-acre restricted area, is surrounded by a fence, and contains approximately 90,000 cubic yards of asbestos and asbestos-containing materials. The types of restrictions placed on the OUI Millington property significantly limit any type of intrusion onto the landfill, thereby restricting on-site groundwater usage and limiting development on the asbestos fill areas. Any use of the landfill area must be designed to protect the integrity of the components of the landfill.

Remedy Implementation - Operable Unit One - Treatability Studies for Permanent Destruction or Immobilization of Asbestos

The OU1 ROD required that, after the implementation of the cap, EPA conduct treatability studies to evaluate any innovative treatment technologies that may be effective in permanently remediating asbestos. Upon completion of these studies, EPA would evaluate the applicability of these technologies to the Site and may choose to select such a technology in a future ROD. Since the issuance of the OUI ROD, EPA has performed treatability studies on two technologies and evaluated a third technology for potential applicability to the OUI site. The results of these studies/evaluations are presented below.

As part of the OU2 activities, EPA evaluated asbestos remedial technologies. Solidification/stabilization of ACM, in addition to capping, was selected as part of the remedy for OU2 in the September 1991 ROD. The solidification/stabilization process served to further immobilize asbestos in the soils, providing an extra level of protection, should the integrity of the cap be compromised by erosion or other unforeseen circumstances in the future. A

Treatability Study was conducted in the design phase for OU2. The results of the Treatability Study demonstrated that solidification/stabilization of ACM above the water table would be effective at immobilizing the ACM. The solidification/stabilization component of the OU2 remedy was successfully implemented at the White Bridge Road site in December 1997 and at the New Vernon Road site in September 2000. Although the solidification/stabilization technology used as part of the OU2 remedy provides an additional level of protection to the OU2 sites, it does not result in the permanent destruction of asbestos or return the site to unrestricted use. Long-term O&M activities are still required at OU2.

The solidification/stabilization technology would not be appropriate or cost efficient for use at OU1. The OU1 landfill currently has a protective cap constructed over the ACM. Any additional level of protection that the application of the solidification/stabilization technology may afford is not necessary at this industrial site. The institutional controls which have been put in place as well as the established O&M procedures are expected to assure that the integrity of the cap is not compromised and this remedy should remain fully protective of human health and the environment over time.

Another innovative technology, involving a type of vitrification (thermal treatment resulting in an asbestos-free glass), was bench-tested for evaluation of the OU3 remedy prior to the 1997 OU3 Feasibility Study. This technology did not pass the feasibility study screening process. The technical result of the bench test proved to be promising; however, the capital costs, permitting expenses and operating costs were prohibitive.

Thermochemical asbestos conversion (destruction) technologies were developed by the private sector in the 1990's and early 2000's to convert ACM to non-hazardous waste. These technologies are still considered to be relatively new and have yet to be implemented at any Superfund site. For OU1, implementation of the thermochemical treatment would involve the excavation of approximately 90,000 cubic yards of landfill material, which would be a huge undertaking. Furthermore, the excavated material would have to be treated and either returned to the landfill as backfill material or shipped off-site for disposal. The thermochemical treatment technologies are currently being considered for use at an EPA Region 9 site; however, the cost of implementing such a technology may be prohibitive. Based on available treatment rates, the cost for implementing the asbestos destruction technology at OU1 of the Asbestos Dump Site was estimated to be well over \$90 million. Given the substantial cost to implement this asbestos treatment technology and the lack of available data regarding its long-term effectiveness, EPA does not believe that this technology is appropriate to use at the Asbestos Dump Site at this time.

EPA believes that the OU1 remedy, including the cap constructed over the ACM waste, is protective and will remain protective. Deed restrictions are in place to assure that the landfill cap is not disrupted in the future and the State of New Jersey is performing routine O&M to assure the integrity of the cap. Based on review of the above technologies, EPA does not believe that any of the technologies are warranted for the site and does not plan to modify or change the selected remedy.

Remedy Implementation - Operable Unit Two

On September 27, 1991, the Regional Administrator issued a ROD documenting the RA for OU2, the New Vernon Road and White Bridge Road properties. For clarity, this section will describe the remedial construction activities for the New Vernon Road and White Bridge Road properties separately.

New Vernon Road

Remedial action commenced at the New Vernon Road property in June 1994. The construction was performed in two separate phases, marked by schedule milestones of Substantial Completion and Final Completion. The first phase took place between August 1994 and December 1994 and included the following: 1) excavation and consolidation of ACM; 2) in-situ solidification/stabilization of ACM; 3) impermeable cover and perimeter infiltration trench construction; 4) placement of rip rap along the sides of the cap for slope stability protection; and 5) backfill of excavation areas excluding topsoil and seeding.

Both clean and contaminated excavation was conducted at the New Vernon Road property. An area, known as Area A, was designated as a clean excavation area. The clean soils from Area A were excavated and deposited in a clean stockpile area for subsequent use as backfill material. A number of additional contaminated excavation areas were identified. The asbestos-contaminated soils were excavated from these sites and hauled to Area A and the primary solidification area and spread in 12-inch lifts for subsequent solidification. Backfill materials were obtained from on-site and off-site sources. On-site fill was obtained from Area A. Off-site fill materials were used for backfilling the additional excavation areas.

An area approximately 3.9 acres in size was solidified to a depth of three feet below the pre-existing grade. Solidification was performed by mixing ACM with cement grout via an on-site batch mixing plant. The solidification process was considered to be complete when the grout mixture had set, and quality control sample results indicated that the solidified mass conformed to the specified design criteria.

A protective impermeable cap over and a perimeter infiltration trench around the solidified area was constructed. The cap consisted of six inches of stone screenings, a geomembrane liner constructed of 60-mil High Density Polyethylene to prevent infiltration through the solidified mass, a geocomposite drainage layer, a 24-inch layer of common fill, and a vegetative layer consisting of six inches of topsoil and grass. To prevent erosion and maintain slope stability of cover soils, a layer of four-inch stone fill underlain by non-woven filter fabric was placed along the side slopes of the filled area, directly over the perimeter trench. Runoff and infiltration water from the cap area drains through the stone layer into the perimeter trench.

The second phase of remedial action activities began on March 27, 1995 and was intended to include site restoration work such as final grading with topsoil, grass establishment, planting, wetlands restoration, asphalt paving, and demobilization. The second phase was halted when EPA issued a Stop Work Order on March 30, 1995. The Stop Work Order was issued to allow

EPA to investigate the technical and contractual issues related to the placement of backfill material which EPA determined did not meet the contract specifications. EPA subsequently issued a Cure Notice, on April 7, 1995, to CDM Federal Programs Corporation (CDM), an EPA contractor, for failure to meet the contract specification for the use of fill at both the New Vernon Road and White Bridge Road properties.

The Cure Response at the New Vernon Road property included the removal of all unacceptable fill, at no cost to the government. Approximately 30,000 cubic yards of unacceptable backfill material was removed at the New Vernon Road property. In June 1998, the government acquired the New Vernon Road property and the property owners were permanently relocated. The Cure Response cleanup activities at New Vernon Road were initiated in July 1998 and completed by March 1999. The USACE provided oversight of the Cure Response cleanup activities. In September 2000, EPA approved the Remedial Action Report for the New Vernon Road portion of OU2.

In June 2001, an O&M plan for the New Vernon Road site was finalized. The overall objective of the O&M Plan is to provide for periodic inspection, maintenance, and monitoring to evaluate and maintain the effectiveness of the remedy implemented at the site. The landfill cap, perimeter infiltration trench and environmental monitoring, are the key components of the O&M Plan. Environmental monitoring includes the collection and analysis of groundwater and monitoring of wildlife species from the area around the New Vernon Road site.

In January 2002, EPA, NJDEP and the FWS reached an agreement on the terms of the transfer of a portion of the New Vernon Road property to FWS to expand the GSNWR. In September 2002, an approximate 25-acre portion of the New Vernon Road property (Block 225, Lot 30) was formally transferred to FWS and is now in use as part of the Refuge. This Lot also includes the residential structures along New Vernon Road. The remaining five-acre portion of the property (Block 225, Lot 30.03), which contains the solidified ACM, was transferred to the State of New Jersey. NJDEP is conducting the O&M activities on the five-acre parcel of the property.

Subsequent to the division of the New Vernon Road property between NJDEP and FWS, separate Deed Notices were filed for Block 225, Lots 30 and 30.03. The Deed Notice for Block 225, Lot 30 was filed in the Morris County, New Jersey, Office of the County Clerk on August 20, 2002. The Deed Notice includes a "Limited Subsurface Use Area" which exists within 10 feet of the foundation of the residences. This area is restricted because it could not be fully investigated for the presence of asbestos because such investigation would have compromised the integrity of the substructure. Digging and excavating more than 12 inches below the surface of the Limited Subsurface Area is prohibited unless approved by EPA or NJDEP. The Deed Notice for Block 225-Lot 30.03, which pertains to the five-acre capped OU2 parcel, was filed in the Morris County, New Jersey, Office of the County Clerk on October 22, 2002. The Deed Notice specifies the restrictions placed on the capped area of OU2. The Deed Notice does not permit any disturbance of the surface or subsurface of the capped area including, but not limited to filling, drilling, excavation, or the removal of topsoil, sediments, rock or minerals, or by

construction, planting anything other than grass or wildflowers, or changing the topography in any manner; however, topsoil may be added to make repairs in accordance with the Deed Notice. Changing, damaging or removing the perimeter trench around the solidified mass, the manholes or the monitoring wells is also prohibited.

White Bridge Road

Remedial construction activities for the White Bridge Road property were initiated in June 1994. The first phase of activities included excavation, solidification, backfilling and construction of the impermeable cover. Field work occurred between August 1994 and December 1994. ACM was excavated and consolidated into one central area of the White Bridge Road property. A higher volume of ACM was excavated than initially anticipated; therefore, a settlement analysis of the solidified mass was performed. Analytical results indicated that additional settlement of up to nine inches could occur, which would place the solidified mass in contact with the groundwater. As a result, the initial design solidification depth was reduced to ensure that the solidified mass did not come in contact with the water table. This change in design was documented in an ESD, dated October 20, 1993. Approximately 2.5 acres of land were solidified at the White Bridge Road site. The final depth of the solidified ACM was approximately 2.5 feet below the ground surface.

An impermeable cover was constructed over the solidified mass. The cover consisted of six inches of stone screenings, an impermeable high density polyethylene liner, a geonet drainage layer, 24 inches of common fill, and six inches of topsoil which was subsequently seeded. A perimeter trench was also installed in conjunction with the impermeable liner. The trench was three feet deep and five feet wide located on three sides of the landfill approximately three feet from the edge of the solidified mass. A minimum of a nine-inch layer of course aggregate was placed at the bottom of the trench followed by perforated and corrugated flexible pipe laid on the stone bed. At original grade, the geotextile fabric was wrapped across the top of the trench and overlapped. Furthermore, the trench was finished with a sloped layer of four-inch stone. A drainage layer, consisting of geosynthetic materials was placed over the geomembrane and common fill was placed over the drainage layer. The final layer consisted of topsoil which was seeded to stabilize the soil and establish grass cover.

The second phase of remedial construction activities included site restoration. Site restoration included topsoil placement, fence construction, monitoring well installation, stockpile removal, seeding and landscape replacement. This phase was conducted between March and November 1995.

After implementation of the first phase of the remedy, EPA discovered that some of the fill material, which was used by the contractor on the White Bridge Road property, had originated from a facility subject to the New Jersey Cleanup Responsibility Act, now the Industrial Site Recovery Act. On April 7, 1995, EPA issued a Cure Notice to CDM, indicating that this material failed to meet the contract specifications for fill. This was the same Cure Notice that was issued for the New Vernon Road property, as described in the previous section.

Approximately 1,010 cubic yards of this unacceptable fill material, which had been used in three areas on the White Bridge Road property, had to be addressed. The work performed under the Cure Notice Response Workplan was completed on August 28, 1995 and was performed at no cost to EPA or the State.

Remedial construction activities for the White Bridge Road site were completed in October 1995. The Final Remedial Action Report, prepared by CDM, was approved by EPA in December 1997. In April 2000, EPA conducted activities at White Bridge Road to re-establish the vegetative cover and install a trench drain on the surface of the cap. An O&M Plan was written for the White Bridge Road site in July 2001. The O&M Plan includes the maintenance and monitoring of site features including the landfill cap, perimeter infiltration trench, and environmental monitoring. O&M obligations are shared between both the property owners and NJDEP. Property owners are largely responsible for mowing and maintaining the capped area along with maintaining other site features while NJDEP is primarily responsible for the environmental monitoring activities. Details of the O&M obligations are outlined in the January 2001 Deed Notice.

On January 5, 2001, the owners of the OU2 White Bridge Road property filed a Deed Notice with the Morris County Clerk. EPA and the State of New Jersey agreed on the terms of the Deed Notice. The Deed Notice has the same general restrictions as those included in the New Vernon Road Deed Notice whereby any disturbance of the surface or subsurface cap is strictly prohibited. In addition, the White Bridge Road Deed Notice specifically prohibits the following: horseback riding; any type of pasturing what would result in a permanent pattern on the solidification area or that will cause damage to the vegetative cover; any activity that might compromise the integrity of the solidified mass or its cap; and moving the fence posts installed on the top of the solidified mass area.

In February 2002, EPA deleted the White Bridge Road portion of the site from the NPL.

Remedy Implementation - Operable Unit Three

On September 8, 1998, the Regional Administrator signed a ROD for OU3. The United States Department of the Interior (DOI), acting through the FWS, was the lead agency for the remediation of OU3, and EPA was the oversight agency. The USACE was contracted by the FWS to design the remedies and perform construction activities. Construction activities were subcontracted by the USACE to the IT Corporation. The FWS established a three-phase approach for remediating the OU3 areas described in the previous OU3 background section.

Phase I addressed the activities conducted as an emergency response action to install drainage improvements at the OU3 site and remove buried drums from Site A. Access to Site A was improved by upgrading the surface of the UAR and clearing dense vegetation covering Site A. The site drainage was enhanced by clearing the channel constriction and blockage where the UAR crosses the Old Great Brook Channel northwest of Site A, which was also the location of a beaver dam. A culvert system was placed in the channel to maintain vehicle access to Site B and improve site drainage. FWS also conducted interim drainage improvements in July 1997 by

constructing a bypass channel to divert Old Great Brook surface water flow away from Site A. After drainage improvements were completed, drum excavation and removal, and off-site disposal of the drums and miscellaneous debris were initiated and completed in October 1997. The non-emergency, time-critical removal action included the excavation of 207 buried drums and was undertaken to eliminate any threat of future leaching of drum contents to groundwater. Post-excavation soil samples were collected and the analytical results confirmed that contaminants in the drums had not been released to the soil and, therefore, were not released to groundwater above the regulatory standards before or during removal. Phase 1 work was completed in 1997.

The Phase 2 removal action included the excavation, removal, and off-site disposal of lead-contaminated soils located at Site B, Refuse Area #1, and Refuse Area #6 (as defined in the OU3 background section). The action was initiated in February 1998 and was completed in May 1998. Removal activities also included the consolidation of ACM from Site B onto Site A. The total volume of lead-impacted soils and debris removed and disposed off-site from Site B was approximately 3,460 cubic yards. The total volume of ACM moved from Site B to Site A under the consolidation activities was approximately 740 cubic yards.

Phase 3, the final remedial action phase, included the excavation and removal of ACM from the UAR, consolidation of the excavated UAR material to Site A, backfilling the excavated portions of the UAR, and construction of the biotic cap on Site A.

Cap construction activities included the installation of an anchor trench on the west side of the landfill, compaction of landfill material, placement of geotextile fabric (woven and non-woven) and placement of geonet for the biotic barrier. The fabric was placed over the top of the landfill surface, with panels or sections of the fabric and geonet overlapping at a minimum of six inches. Soil material from an on-site stockpile was placed over the geotextile/geonet cap. Construction of the biotic cap on the Site A landfill was considered to be complete after a final inspection was conducted in September 1999.

The disturbed and created wetlands areas were restored by placing a final soil cover, consisting of six inches of organic sediment, over the areas. The sediment contained a natural seed bank with species indigenous to adjacent wetlands. The progress of wetlands restoration efforts continues to be monitored.

The O&M Plan for OU3 includes maintenance of the permanent features such as the surface water drainage improvements and the Site A biotic cap. The O&M plan also requires the implementation of a groundwater monitoring program that meets the requirements of the New Jersey Pollutant Discharge Elimination System regulations. FWS is responsible for implementing the OU3 O&M plan.

In addition to O&M activities, FWS has implemented institutional controls at OU3 to ensure the continued integrity of the capped areas. OU3 institutional controls include the following: 1) restricted access via a gated road; 2) posted signs indicating closed areas; 3) law enforcement presence; 4) altered trail system to divert people from the landfill area; and 5) periodic inspections. The OU3 property is located entirely within the Great Swamp National Wildlife

Refuge). As part of the National Wilderness Area, the remediated OU3 area is protected from development or future land uses that might potentially conflict with the remedial design. Any changes to this designation would be subject to Congressional approval. As such, the land will be managed in perpetuity as wildlife habitat with very limited public use and access insofar as these activities are consistent and compatible with the O&M actions that have been prescribed for the site.

On September 29, 1999, EPA approved the Final Remedial Action Report for OU3, which signified the completion of OU3 remedial activities.

Community Relations

Community Relations – Operable Unit One

The draft RI and FS reports along with the Proposed Remedial Action Plan (PRAP), which identified EPA's preferred remedial alternative, were released to the public on August 19, 1988. All three documents were placed in the public repository at the Passaic Township Hall. A public comment period was held from August 19, 1988 through September 9, 1988. A public meeting was held on August 29, 1988 at the Passaic Township Hall to present the RI/FS and EPA's proposed remedy and to solicit public input. The issues raised during the comment period were addressed in the Responsiveness Summary Section of the ROD.

Throughout the remedial process, several public meetings had been held in an effort to keep the public informed of site cleanup activities. For example, a public meeting was held on April 15, 1999 at Town Hall in Long Hill Township to discuss details of EPA's construction plans for the OU1 portion of the Asbestos Dump Superfund Site. Another meeting was held with town officials on May 5, 1999 to discuss the remedy implementation for OU1. Communication between EPA, town officials and the public also occurred regularly prior to and during the construction period.

For the 2005 OUI Five-Year Review, EPA notified the community of the initiation of the Five-Year Review process by publishing a notice in the *Courier News* on September 17, 2005. The notice indicated that EPA would be conducting a five-year review of the remedies at the Asbestos Dump Site to ensure the remedies remain protective of public health and are functioning as designed. In addition, the notice indicated that once the five-year review process was completed, the results would be made available to the public at the Long Hill Township Free Library.

Community Relations – Operable Unit Two

On July 8, 1991, EPA issued a notice in two local newspapers, which contained information relevant to the public comment period for the site, the date of the public meeting and availability of the administrative record. The public comment period began on July 8, 1991 and ended on August 7, 1991. The public meeting was held on July 17, 1991 at the Passaic Township Free Public Library located in Sterling, NJ. The Proposed Plan was presented at the meeting and the

public was given an opportunity to raise questions and concerns about the site to EPA. In addition, written comments were accepted during the public comment period. Responses to the comments received during the public comment period were incorporated into the Responsiveness Summary, included in the ROD. In addition, there was frequent communication between EPA and its representatives and the residents of the White Bridge Road and New Vernon Road sites prior to and throughout construction activities.

The latest five-year review for OU2 was conducted in 2005, in conjunction with the OUI five-year review. Accordingly, community notification of the intent and scope of the review was included in the OUI notification as described in the section above.

Community Relations – Operable Unit Three

Once finalized, the RI report, FS report and Value Engineering Report for OU3 were released to the public. The Proposed Plan was issued for public comment on December 12, 1997. These documents were made available to the public in the FWS administrative record file at the Refuge Liaison's office and the information repositories at the Long Hill Township Free Public Library, located in Sterling, New Jersey and the Harding Township Kirby Municipal Building, Town Clerk's Office located in Vernon, New Jersey. The notice of availability for the above-referenced documents was published in the *Echoes-Sentinel* and *Newark Star-Ledger* on December 10, 1997 and in the *Chatham Courier, Daily Record* and *Observer-Tribune* on December 11, 1997. The public comment period on these documents was held from December 12, 1997 to January 16, 1998 and extended upon request to February 27, 1998.

For OU3, frequent informal meetings had been the preferred method of information distribution requested by the public during early community relations scoping interviews. Consequently, FWS hosted three Community Information Open House forums to which all interested citizens and representatives of village and county agencies were invited. Attendees participated in informal discussions, presentations, and question and answer sessions. In addition, nine fact sheets had been distributed to a mailing list of over 150 interested parties. Periodic briefings were also held for several elected officials and a FWS liaison position and telephone hotline was staffed to facilitate information transfers.

On December 17, 1997, FWS conducted a public meeting to inform local officials and interested citizens about the Superfund process, to present the proposed remedy, review past removal activities at the OU3 site, and to respond to any questions regarding OU3 from area residents and other attendees.

In February 1998, a Technical Assistance Grant was awarded by EPA to a stakeholder group. The Great Swamp Watershed Association used the grant to assist its participation in reviewing response actions for all operable units of the Asbestos Dump Superfund Site, including OU3.

Responses to comments received at the public meeting and in writing during the public comment period were included in the Responsiveness Summary, which was included in the OU3 ROD.

Notification of the 2005 Five-Year Review was published in the *New Jersey Star-Ledger*, including all County editions, on August 1, 2005 and in the *Morris County Daily Record* on July 29-31, 2005. Following the completion of the review, the results of the Five-Year Review were placed in the public repository, located at the GSNWR headquarters.

III. DEMONSTRATION OF CLEANUP ACTIVITY QUALITY ASSURANCE AND QUALITY CONTROL

For OU1 and OU3, the RA activities were conducted by IT Corporation, under contract with USACE. EPA and the State reviewed the remedial construction activities for compliance with quality assurance and quality control (QA/QC) protocols. Construction activities at OU1 and OU3 of the Site were determined to be consistent with the RODs, RD plans and specifications, and RD/RA statements of work issued to the contractors. Furthermore, the Quality Control (QC) program for both operable units included inspections and documentation of site activities to ensure compliance with the remedial action contracts. The QC program also established the measures for management and control of items or activities affecting quality and to verify and document compliance to the specified requirements as outlined in the contract specification. The measures included, but were not limited to, the following: 1) design control; 2) project planning; 3) documents/records control; 4) corrective actions; 5) chemical/analytical testing; 6) subcontractor controls; 7) inspections/audits; 8) investigations and studies; and 9) use of standard QA/QC forms. Quality Assurance Project Plans (QAPPs) had also been developed according to EPA requirements. The QAPPs incorporated EPA and State QA/QC procedures and protocols. EPA analytical methods were used for confirmation and monitoring samples during RA activities.

For OU2, the RA activities were conducted by CDM, under contract with EPA. CDM performed oversight of all field work performed by its subcontractor, Geo-Con. Inspections and tests were performed to ensure that all work was in strict compliance with the contract documents and the Quality Control Plan (QCP). Geo-Con provided a complete inspection and testing program that established inspection and testing procedures followed from the beginning through final completion of each OU2 RA work item. During the execution of the remedial action at the OU2 sites, CDM performed oversight of QA/QC verification sampling conducted by the subcontractor. Three types of samples were collected: asbestos area confirmatory sampling, solidification/stabilization area confirmatory sampling, and clean excavation area confirmatory sampling.

In March 1995, EPA issued a Stop Work Order to CDM to address technical and contractual issues related to the backfill material associated with OU2. A Cure Notice was subsequently issued by EPA on April 7, 1995 to CDM for failure to meet the contract specification for the use of fill at both the New Vernon Road and White Bridge Road properties. Corrective action work, regarding the backfill material, was completed in August 1995 for the White Bridge Road Property and March 1999 for the New Vernon Road property. EPA approved the RA reports for the White Bridge Road and New Vernon Road properties in 1997 and 2000, respectively.

IV. MONITORING RESULTS

Ongoing OU1 and OU2 monitoring activities primarily include the inspection of the landfill covers, inspection of installed drainage features, inspection of the retaining wall (for OU1 only) and groundwater monitoring. Periodic inspections for OU1 and OU2 are conducted by NJDEP. As per the 2005 Five-Year Review Report for OU1 and OU2, inspection findings indicated that the landfill covers and drainage/detention basins were in good condition. Furthermore, there were no signs of damage to the locks, casings or caps of the groundwater monitoring wells. In April 2005, groundwater samples were collected by NJDEP from seven monitoring wells located at OU1 and six monitoring wells located at OU2. Groundwater was analyzed for asbestos. Monitoring results indicated that asbestos was not detected in any of the sampled wells. Five surface water samples were also taken from the Passaic River for OU1 and asbestos was not detected in any of the samples. The next sampling event for OU1 and OU2 will be conducted in 2010.

For OU3, FWS conducts monitoring activities which include, but are not limited to, inspection of the landfill cap, inspection of drainage improvements, and groundwater monitoring. In addition, there is an environmental monitoring component which includes an analysis of surface water, groundwater, sediment and biota samples from the area around Site A. Environmental monitoring parameters, which are analyzed for each media, include target compound list (TCL) volatile organic compounds, TCL semivolatile organic compounds, TCL pesticides, polychlorinated biphenyls (PCBs), herbicides, target analyte list (TAL) metals, and asbestos. Based on data reviewed in the 2005 Five-Year Report for OU3, no substantive detection of environmental contaminants (TCL pesticides/PCBs, herbicides, TCL volatile organic compounds, and TCL semivolatile organic compounds) had been noted in sediment, surface water, or groundwater. Data from October 1999 through December 2004 indicated that a number of TAL metals and asbestos had been detected; however, exceedences of screening values had become less common for each of the TAL metals over the five-year monitoring period. Furthermore, there have been no detections of asbestos in any media at OU3 since December 2002. Results of the 2005 Five-Year Review inspection further indicated that there were no substantive issues with regard to the structure or function of the landfill. The next sampling event for OU3 will be conducted in 2010.

V. SUMMARY OF TOTAL REMEDIAL CONSTRUCTION COSTS

The final remedial action construction costs for OU1, OU2 and OU3 were as follows: 1) OU1 costs were approximately \$3,500,000; 2) OU2 costs for New Vernon Road were approximately \$3,097,744 while the estimated cost for White Bridge Road, based on the remedial design, was \$2,428,415; and 3) OU3 costs, as funded by the FWS, were approximately \$3,135,000. The total site costs for all operable units, incurred by EPA to date, are approximately \$28,419,734. Additional costs were incurred for the site and paid for by the National Gypsum Company prior to its bankruptcy. FWS also spent additional funds on the remedial investigation and feasibility studies for OU3.

VI. PROTECTIVENESS

This Site meets all the site completion requirements as specified in OSWER Directive 9320.2-09-A-P, *Close Out Procedures for National Priorities List Sites*. The implemented remedies for OU1, OU2 and OU3 of the Asbestos Dump Superfund Site currently protect human health and the environment because the remedial actions have eliminated exposure pathways that could result in unacceptable risks. Furthermore, unacceptable risks are not anticipated as long as the engineered, access and institutional controls are properly monitored and maintained and the site uses remain consistent with the remedies. These controls will ensure the protectiveness of human health and the environment.

VII. FIVE-YEAR REVIEW

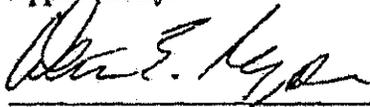
Subsequent to the completion of the remedial actions as described in previous sections, hazardous substances, primarily asbestos-containing materials, remain at all three operable units of the Asbestos Dump Site above levels that allow for unlimited use and unrestricted exposure. Pursuant to CERCLA section 121(c), EPA will continue to conduct statutory Five-Year Reviews to ensure that the implemented remedies remain protective of human health and the environment.

The 2005 Five-Year Review report for OU1 and OU2 concluded that the remedies are functioning as intended in the respective RODs. The OU1/OU2 report indicated that aside from continued compliance with institutional controls and monitoring of engineering controls, there are no issues or recommendations for follow-up activities for OU1 and OU2. Due to the presence of asbestos-containing materials present in the landfill areas of the site properties, periodic sampling will continue to be conducted in accordance with the respective O&M plans. The implemented remedies for OU1 and OU2 of the Asbestos Dump Superfund Site are currently protective of human health and the environment because there are no exposure pathways that could result in unacceptable risks and none expected as long as the engineered, access, and institutional controls are properly monitored and maintained, and the site uses remain consistent with the remedy.

The 2005 Five-Year Review report for OU3 concluded that the remedy is functioning as intended by the ROD. During the last five years of O&M implementation, there has been ample documentation that the landfill is successfully meeting its intended protective purpose. The remedy has also been successful in its habitat restoration and wildlife goals. Numerous species are now found using the restored habitat on and around the OU3 landfill. No substantive issues with the structure or function of the landfill have been identified. No substantive detections of environmental contaminants have been noted in the sediment, surface water, or groundwater, and it is recommended that monitoring for these parameters be continued. The remedy is functioning as intended and remains protective of human health and the environment.

The next Five-Year Review for the Asbestos Dump Superfund Site will be conducted in 2010.

Approved By:



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Emergency and Remedial Response Division
EPA - Region 2

Nov. 10, 2009

Date

BIBLIOGRAPHY

SUPERFUND FINAL CLOSE OUT REPORT Asbestos Dump Superfund Site

- Record of Decision, Asbestos Dump Superfund Site - Millington Site, September 30, 1988.
- Remedial Investigation Report - Millington Site, Fred Hart Associates, Inc., February 29, 1988.
- Remedial Action Report - Asbestos Dump OU-1 Superfund Site, IT Corporation, February 2000.
- Investigation Report - Asbestos Dump Site, OU1, CDM Federal Programs Corporation, March 1, 1995.
- Asbestos Dump Site - Millington, Final Remedial Design Report, CDM Federal Programs Corporation.
- Deed Notice-50 Division Avenue, Millington, New Jersey, Book 21152, Page 508, Filed in the Morris County, New Jersey, Office of the County Clerk September 8, 2008.
- Addendum to Remedial Investigation Report-Millington Site, Fred Hart Associates, Inc., April 14, 1988.
- Five-Year Review Report - Asbestos Dump Superfund Site, Operable Unit 1 and Operable Unit 2, September 2005.
- 30-Year Operation and Maintenance Plan for Operable Unit 1 - Asbestos Dump Superfund Site, IT Corporation, September 2001.
- Record of Decision, Asbestos Dump Superfund Site - New Vernon Road and White Bridge Road Sites, September 27, 1991.
- Final Remedial Action Report, Volume I, Asbestos Dump, New Vernon Road Site, CDM Federal Programs Corporation, September 26, 2000.
- Final Remedial Action Report, Volume II, Asbestos Dump, New Vernon Road Site, CDM Federal Programs Corporation, September 2000.
- Operation and Maintenance Plan, Asbestos Dump Site, Operable Unit 2, New Vernon Road Property, U.S. EPA, June 2001.

Asbestos Dump Site, Operable Unit 2, Final Design Report, TAMS Consultants, Inc./TRC Environmental Corp., January 1993.

New Vernon Road Site, Final Focused Remedial Investigation Report, Alliance Technologies Corporation, June 10, 1991.

Operation and Maintenance Plan, Asbestos Dump Site – Operable Unit 2, White Bridge Road Property, U.S. Environmental Protection Agency, July 2001.

Final Remedial Action Report, Asbestos Dump, White Bridge Road Site, Volume 1, CDM Federal Programs Corporation, December 27, 1996.

Notice of Intent to Delete the White Bridge Road Property of the Asbestos Dump Superfund Site, Operable Unit Two, from the National Priorities List, U.S. EPA, November 26, 2001.

Record of Decision for Operable Unit 3 of the Asbestos Dump Superfund Site, U.S. Fish and Wildlife Service, September 8, 1998.

Five-Year Review, Operable Unit 3 of the Asbestos Dump Superfund Site, U.S. Fish and Wildlife Service, November 2005.

Remedial Action Report, Operable Unit 3, Great Swamp National Wildlife Refuge Site, IT Corporation, August 1999.

Remedial Action Work Plan, Operable Unit 3 of the Asbestos Dump Superfund Site, Foster Wheeler Environmental Corporation, June 1998.

Operation and Maintenance Plan for Operable Unit 3 of the Asbestos Dump Superfund Site, IT Corporation, May 1999, Revised August 11, 1999.

Phase II Remedial Investigation Report, Operable Unit 3 of the Asbestos Dump Superfund Site, Volume I, Foster Wheeler Environmental Corporation, January 1997.

Phase II Remedial Investigation Report, Operable Unit 3 of the Asbestos Dump Superfund Site, Volume II, Foster Wheeler Environmental Corporation, January 1997.

Deed Notice for Block 225-Lot 30, Filed in the Morris County, New Jersey, Office of the County Clerk on August 20, 2002.

Deed Notice for Block 225-Lot 30.03, Filed in the Morris County, New Jersey, Office of the County Clerk on October 22, 2002.

Deed Notice for White Bridge Road Property, Filed in the Morris County, New Jersey, Office of the County Clerk on January 5, 2001.