

OFFICE OF ADJUDICATIONS

IN THE MATTER OF : **APPLICATION NOS. 200002164,
AND 200002242**

**CONNECTICUT RESOURCES
RECOVERY AUTHORITY** : **MARCH 23, 2001**

PROPOSED FINAL DECISION

I

SUMMARY

The Connecticut Resources Recovery Authority (the applicant or CRRA) has filed applications to modify a solid waste permit and a groundwater discharge permit it holds in connection with its operation of the Hartford Landfill. The modification to its solid waste permit seeks to alter the design of the Phase I lined ash residue disposal area by increasing the final elevation of the landform from 72 feet to 112 feet. The groundwater discharge permit application seeks modifications associated with the increase in the final elevation of the Phase I facility.

The CRRA filed its application in July 2000, pursuant to General Statutes §§22a-208a, 22a-430 and relevant regulations. The Department of Environmental Protection (DEP) tentatively approved the application in October 2000, authorizing the alteration of the Phase I ash disposal area and allowing the ash residue originally intended for disposal in the Phase II lined ash residue facility to be relocated and disposed of in the Phase I lined ash residue facility. The DEP also proposed to rescind, as part of the modification of the solid waste permit, its prior approval to construct the Phase II lined ash residue facility.

The parties to this proceeding are the CRRRA (the applicant), the DEP Bureau of Waste Management and Bureau of Water Management (Staff), and the following Intervenor: Survivors On Sunset (SOS); the Hartford Environmental Justice Network (HEJN); and O.N.E./C.H.A.N.E., Inc. (One/Chane).

A site visit was conducted on November 27, 2000; all parties were present except One/Chane, which intervened after the date of the site visit. Hearings commenced with sessions for the receipt of public comment on November 28 and 29, 2000. Hearings were continued on December 1, 4, and 8, 2000, with another hearing for public comment on December 12, 2000. Hearings continued on December 13, 19 and 20, 2000, and concluded on January 5, 2001. The record remained open until January 31, 2001 for the receipt of written public comment. All post-hearing briefs and reply briefs were filed by February 14, 2001.¹

Upon review of the relevant facts, evidence and applicable law in this matter, I find that the application to modify the solid waste permit, which will increase the height of the existing Phase I lined ash landfill by 40 feet, is consistent with and satisfies all applicable statutory and regulatory provisions outlined herein. The expansion of the Phase I facility will relocate the ash combustion residue that was approved for disposal at the Phase II facility and will increase the capacity of the Phase I facility, but will not add to the total capacity of ash that was previously approved for disposal in the Phase I and

¹ The applicant has attached two documents to its brief and two to its reply brief. Unless a hearing officer or the Commissioner rules otherwise, after a hearing has concluded, no further evidence shall be admitted unless it is relevant and material and there was good cause for the failure to offer it at the hearing. In addition, other parties and intervenors shall be allowed an opportunity to respond to the evidence, including an opportunity to cross-examine the person offering the evidence. RCSA §22a-3a-6(w). Two of the documents were offered at hearing and objections to their admission were sustained. The applicant has made no argument for its failure to offer the others at hearing. The parties and intervenors have not been allowed the opportunity to cross-examine the applicant regarding the new evidence. I have therefore not considered this evidence as part of the applicant's post-hearing submissions. See also RCSA §22a-3a-6(x).

Phase II facilities. The expansion will also not change the nature of the waste disposed, nor will it change the way in which the facility operates to dispose of the ash.

I further find that the application to modify the groundwater discharge permit is consistent with and satisfies all relevant statutory and regulatory criteria described herein. There will be no significant change in leachate quality, and there will be no substantial change in the nature or operation of the perimeter confining slurry wall and groundwater collection and control system as a result of increasing the final elevation of the Phase I lined ash residue disposal facility.

If the applicant adheres to the conditions in the proposed permit modifications, the public health, safety and welfare will be safeguarded and enhanced, and the natural resources of the State will be conserved, improved and protected. I therefore recommend that the permit modifications be issued in accordance with the terms and conditions of the draft permit modifications (Attachments 1 and 2), with the further modifications outlined herein.

II

FINDINGS OF FACT

A

Permit History

1. The City of Hartford submitted an application dated July 5, 1978 for a permit to expand and operate a solid waste disposal area on approximately 38 acres of property owned by the City of Hartford located in the North Meadows east of Interstate-91, adjacent to and immediately north of an existing 80-acre landfill

- (the Hartford Landfill). The Commissioner of the DEP granted the City solid waste Permit No. 064-4(L) on February 5, 1979. (Ex. DEP-4.)
2. In June 1982, the City of Hartford requested that the DEP transfer all operational permits for the Landfill to the applicant CRRA. On June 30, 1982, the Commissioner approved the transfer to the CRRA of all applicable permits, including solid waste Permit No. 064-4(L), effective July 1, 1982. (Ex. DEP-4; test. D. Brown 12/1/00, pp.110-111.)
 3. On March 25, 1994, the DEP Bureau of Waste Management staff prepared a Preliminary Determination of Need (DON) pursuant to General Statutes §22a-208(d) regarding an application of the CRRA for an expansion of the Hartford Landfill to accommodate the disposal of municipal solid waste (MSW) combustion ash residue. Staff concluded that the total design volume of approximately 1.2 million cubic yards was necessary to meet the solid waste disposal needs of the state. (Exs. DEP-9, 10.)
 4. On November 8, 1996, the Commissioner issued a modification to solid waste permit No. 064-4(L) for the construction of a double lined landfill. That landfill was to be used solely for the disposal of ash “residue” as defined in the Regulations of Connecticut State Agencies §22a-209-1. The permit modification outlined a phased approach separating construction into Phase I and Phase II, with a total design capacity of approximately 1.2 million cubic yards. This 1996 permit modification superseded all the conditions and provisions of the February 5, 1979 Permit No. 064-4(L). (Exs. DEP-5, 15.)

5. The Commissioner issued Permit No. LF0000014 on February 6, 1998, pursuant to General Statutes §22a-430. The Permit authorized the discharge to groundwater of leachate generated by the natural infiltration of precipitation through the unlined solid waste disposal area, and the leachate generated as a result of precipitation through the ash that could pass through the dual liners in the event of liner failure of the Phase I lined ash residue disposal area.² In issuing the Permit, the Commissioner found that if the liner and collection system failed, the proposed system to treat the discharge to groundwater would protect the waters of the state from pollution. The system included the construction of a slurry wall and a groundwater flow control system. (Ex. APP-2, Volume I, Attachment E1, *Certification Regarding Submittal of Previously Approved Documents*; exs. DEP-6, 8, 16.)
6. The Commissioner also issued Permit No. SP0001412 on February 6, 1998, which covers two discharges. Part A of the Permit authorizes the discharge of leachate from the liner system of the Phase I lined ash residue area to the Metropolitan District Commission (MDC)-Hartford Sewage Treatment Facility. Part B authorizes the discharge of groundwater containing leachate from both the area of the Landfill known as the historical landfill (see *infra*) and the Phase I lined ash residue area (the Ground Water Flow Control System) to the MDC-Hartford Sewage Treatment Facility. (Ex. APP-2, Volume I, Attachment E1, *Certification Regarding Submittal of Previously Approved Documents*; exs. DEP-6, 8.)

² The liner system and groundwater flow control system for the Phase II ash residue disposal area were not included as they were not yet constructed.

7. In May 1999, CRRA submitted applications to the DEP for air, water and solid waste permit modifications to expand the Hartford Landfill site. (Ex. DEP-11.)
8. On July 10, 2000, CRRA filed a *Permit Application for Wastewater Discharges* to modify Permit No. LF0000014 to discharge into the waters of the State of Connecticut under General Statute §22a-430 and Regs., Conn. State Agencies §22a-430-1 *et. seq.* (Ex. APP-2.)
9. On July 18, 2000, CRRA filed a *Permit Application for Construction and Operation of a Solid Waste Facility* to modify Permit Number 064-4(L) pursuant to General Statutes §22a-207 *et. seq.* and Regs., Conn. State Agencies §22a-209-1 *et. seq.* (Ex. APP-1.)
10. These above permit modifications (the July, 2000 applications) were needed to provide for the receipt of previously authorized municipal solid waste (MSW) combustion ash residue at the Phase I ash residue facility, and the receipt of special wastes, including “polluted soils”, at the existing unlined MSW and special waste facility. (Exs. APP-1, 2, 10-13; ex. DEP-1.)
11. By letter dated August 9, 2000, the applicant withdrew the May 1999 applications for air, water and waste permit modifications. (Ex. DEP-11.)
12. Following its review of the July, 2000 applications, in a letter dated October 10, 2000, Staff advised CRRA that it might be more productive to move forward with the applications separately in order for CRRA to resolve remaining issues concerning the MSW/Special Waste portion of the Landfill on a different timeframe. The applicant concurred and, by letter dated October 11, 2000, asked the DEP to bifurcate the July 2000 applications and, as first priority, review the

- portion of the application materials that applied to the ash residue area. (Exs. DEP-12,13; test. D. Brown 12/1/00, pp. 101-106.)
13. The July, 2000 applications were divided. In an October 26, 2000 *Notice of Tentative Determination*, Staff announced its intent to approve modification of Permit No. 064-4(L). This modification would relocate the disposal of the MSW combustion ash residue planned for disposal at the Phase II ash facility to the Phase I facility by increasing the final elevation of the Phase I facility by forty feet. This proposed modification would nullify the prior authorization for the applicant to construct and operate the Phase II ash residue facility. Staff also issued notice that the proposed modification to the Phase I facility would not result in a substantive change to the quality or quantity of the leachate discharge to the groundwater. Staff also noticed that Permit No. LF0000014 would also be modified to incorporate the proposed changes in the Landfill operations and management plan associated with the increase in the final elevation of the facility. (Exs. DEP-1, 2, 3.)
 14. Staff determined that the reconfiguration of the Phase I lined ash residue facility would not result in leachate discharge beyond the conditions of Permit No. SP0001412, and therefore no modification to this Permit was required. (Ex. DEP-13.)

B

The Applicant

15. The applicant is a quasi-public agency established by the General Assembly in 1973 for the purpose of providing solid waste management services to municipalities and businesses. CRRA is a public instrumentality and political subdivision of the state. See General Statutes §22a-261. (Ex. APP-1, Volume I, Attachment D, *Background Information*.)
16. The CRRA provides waste management and recycling services to approximately two-thirds of Connecticut's cities and towns. The applicant's statewide system is delineated by four waste management projects. The projects include four waste-to-energy facilities, two lined ash disposal areas, two large regional recycling centers, twelve waste transfer stations and two bulky waste landfills. The applicant contracts with public and private sector vendors for facility operations. (Ex. APP-1, Volume I, Attachment D, *Background Information*; test. 12/1/00 D. Brown, pp.111-114.)

C

The Intervenors

17. The Survivors on Sunset (SOS) is a neighborhood association comprised of the residents of the eleven homes located on Sunset Street in Hartford. First structured as an informal association, SOS became more formally organized in 1999. Sunset Street is approximately 1500 feet from the Hartford Landfill, and is the closest residential neighborhood to it. SOS wants the Landfill closed and opposes the proposed expansion because of concerns over the impact of the

facility on the health of the residents, their property values, and their quality of life. Most of the residents of Sunset Street have lived on the street for many years and believe their health problems are associated with the growth of the facility and its increased use over the years it has been in operation. (Exs. INT-SOS-1, 2, 3; test. H. Nixon 11/28/00, pp. 104-116, 12/8/00, pp. 172-191; test. C. Stopper 11/29/00, p. 52.)

18. The Hartford Environmental Justice Network (HEJN) is a local affiliate of the Connecticut Coalition for Environmental Justice (CCEJ). The mission of the CCEJ and the HEJN is to protect urban environments in Connecticut through educating the community, promoting changes in state policy, and through promoting individual, corporate and governmental responsibility toward the environment. The HEJN also seeks to eliminate discriminatory siting policies, reduce rates of diseases such as asthma and lead poisoning, and ensure community notification and involvement in decisions that may impact the environment. The HEJN is opposed to the expansion of the Landfill because it claims it is a source of health problems for city residents and that operation of the facility causes a disproportionate impact on the city's minority population. (Ex. INT-HEJN-2; test. M. Mitchell 12/13/00, pp. 42-109.)
19. O.N.E. C.H.A.N.E. Inc.(One/Chane), is a non-profit, community-based organization serving the northeast and Clay Hill neighborhoods of Hartford. One/Chane supports the Landfill expansion because it believes the facility will have no adverse health effects on the community. However, One/Chane has entered into the record concerns regarding the DEP permit process, specifically

public notice and participation. (Ex. INT-One/Chane-1; test. L. Charles 12/19/00, pp. 267-285.)

D

The Site

20. The Hartford Landfill (the Site) is a 120-acre parcel located at 180 Leibert Road, Hartford, on the eastern side of Interstate-91. The Site is owned by the City of Hartford, which previously operated the Site prior to the CRRA commencing operations. The applicant has leased the Site since 1982 under a lease agreement with the City of Hartford. Pursuant to statute, the CRRA contracts with the MDC to operate the facility. (Exs. APP-1, Volume I, Appendix A, *Lease Agreement*, Volume II, Appendix C, *Revised Operations and Management Plan*; ex. DEP-4; test. C. Stopper 11/29/00, p. 37.)
21. Prior to 1955, the Site was used as an open dump with much of the wastes routinely burned in-place. In 1955, an incinerator was constructed on the southern portion of the Site adjacent to the existing municipal solid waste filling area(s). Incinerator ash and bypass materials were disposed of at the Landfill for approximately 21 years. In 1975, the incinerator was closed and MSW was landfilled directly. Municipal solid and bulky wastes were disposed of at the Landfill from 1975 to 1987. (Ex. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*.)
22. In 1987, the applicant constructed the Mid-Connecticut Resource Recovery Facility (Mid-Conn) in the South Meadows section of Hartford. Ash residue from Mid-Conn was disposed on approximately 6 acres at the Landfill, which was later

expanded to 16.8 acres and then to 22.3 acres, in the northeast corner of the existing unlined disposal area. This ash residue disposal area was referred to as the “Interim Ash Area”. Disposal of ash residue in this area stopped in February 1998, when the Phase I lined ash area became operational. (Ex. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*; test. C. Stopper 11/29/00, pp. 37-42.)

23. The Site consists of three distinct disposal areas, two within the unlined portion of the existing Landfill (the historical landfill) and one within a lined portion of the Landfill. In the unlined portion, the “Non-Processible Waste Area” occupies approximately 60 acres over the southern half and the western slope of the historical, unlined portion of the existing Landfill. It is currently used for the disposal of non-processible, non-combustible and oversize wastes from the Mid-Conn facility. Constructed above previously landfilled MSW, the second area, the former “Interim Ash Area”, is an ash monofill that occupies approximately 20 acres in the northeastern corner of the historical, unlined disposal area. By regulation, this area cannot be used for the additional disposal of MSW-type materials. The lined ash residue disposal area occupies approximately 36 acres in the area north and adjacent to the unlined landfill area. The Phase I lined ash area, which is currently active, comprises approximately 16 acres of the total lined ash area. The Phase II lined ash area has not yet been constructed. (Exs. APP- 1, Volume I, Attachment A, *Executive Summary*, 10, 14; ex. DEP-1; test. C. Stopper 11/29/00, pp. 37-41.)

24. The Phase I lined ash area is a geomembrane-lined facility. The area consists of four separate landfill cells. Filling in the Phase I area began in Cell 1, followed by Cell 2. Filling will continue to Cell 4 and then to Cell 3. (Ex. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*.)
25. As required by §22a-209-14 of the Regulations of Connecticut State Agencies, the Phase I facility has a leachate collection system consisting of two synthetic liners, leachate collection piping, a leak detection system, and additional soil layers to protect the liner and leachate collection piping. (Ex. APP-1, Volume III, Appendix G, *Vertical Expansion Leachate Quantity and Quality Evaluation Summary*.)
26. In 1997, a groundwater flow collection and control system (GWCCS) was installed that encloses the unlined landfill and Phase I lined ash area. The GWCCS consists of: a clay slurry wall surrounding the Site on the north, west and south sides; the Army Corps of Engineers flood control dike on the east side, which separates it from the Connecticut River and inhibits the flow of groundwater between the River and the Site; and a groundwater monitoring, pumping, and treatment system. The GWCCS is designed to contain all leachate from the historical landfill and any leachate discharge from the Phase I lined ash facility in the event of damage to its double-liner system. The GWCCS collects, pumps, neutralizes, and discharges the groundwater from beneath the historical landfill and the Phase I facility to the MDC-Hartford Sewage Treatment Facility. (Exs. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*,

Volume III, Appendix G, *Vertical Expansion Leachate Quantity and Quality Evaluation Summary*, 10; ex. DEP-15.)

27. The Phase I lined ash area has an estimated remaining capacity of 380,000 cubic yards. Based on current permitted capacity and rate of filling, the applicant estimates that Phase I has a remaining life of 2.7 to 2.9 years. The approved Determination of Need (DON) for the entire lined ash area also included 575,000 cubic yards of capacity in the Phase II lined ash area, which would provide approximately 4.6 more years of operational life. Therefore, with this additional capacity, the total site life of the Phase I facility is 6.5 to 7.5 years. (Ex. APP-1, Volume 1, Attachment E, *Statement of Consistency with the Solid Waste Management Plan*; test. C. Stopper 11/29/00, pp. 43.)

E

Operations

28. Ash combustion residue from the burning of refuse-derived fuel and coal in the Mid-Connecticut Facility is collected and transported to the Landfill for disposal within the Phase I lined ash area. The waste is quenched with water after the incineration process and has a high moisture content when placed in the trucks for transport. Wastes are received at the Site from 6:30 A.M. until 3:30 P.M. Daily cover and other operations continue until 4:00 P.M. (Ex. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*; test. C. Stopper 11/28/00, pp. 37-38.)
29. Trucks delivering ash to the facility travel north on Interstate-91, exiting at Exit 33 onto Jennings Road, to Liebert Road and into the Landfill. This truck route

does not travel through any residential neighborhoods. All incoming trucks are weighed at the scale house upon arrival at the facility to determine the quantity of material being delivered. Pursuant to state regulation, weights are recorded and records are kept of all incoming materials, including solid waste, cover soils, and construction materials. Also recorded are the identity of the pre-registered trucker/hauler, the truck weight, total weight of load, type of material, time of day of delivery, and location of the cell to be utilized for disposal. The trucks travel from the scale house around the rear of the Site before entering the Phase I ash area, so the trucking operations are not visible from the Interstate-91 side of the facility. Because the expansion of the Phase I facility will not increase its capacity, the rate of truck traffic or the number of trucks coming to the facility will not increase. (Ex. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*, 14; test. C. Stopper 11/28/00, pp. 29-30, 37.)

30. Between March and November, the applicant operates a wheel wash facility at the Site to minimize dust and transport of ash onto off-site roadways. The wheel wash operation uses high-pressure jets to wash down the wheels and undercarriages of vehicles. All ash trucks that come to the Site go through the wheel wash facility before leaving the Site. The wheel wash facility does not operate from late November to early March due to freezing conditions. (Ex. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*; test. C. Stopper 11/28/00, pp. 42, 11/29/00, p.75, 12/1/00, pp. 168-169.)
31. The filling of the cells in the Phase I lined ash area is conducted in phases represented by four separate cells within the area. Within each cell, landfilling

will involve spreading, compacting, and covering of all ash deposited daily. Each cell is filled with ash residue using the sub-cell method of sanitary landfill operation. Ash residue is spread with a bulldozer and compacted with a roller in multiple layers to produce a daily sub-cell. The initial layer of sub-cell is 5-feet thick to protect the structural integrity of the primary and secondary geomembrane liners in the ash area. Each daily sub-cell is no more than 10 feet thick and no more than 100 feet wide. The sub-cells are as long as necessary to accommodate the daily incoming quantity of ash residue. The ash is placed and spread in 2-foot thick or less layers and compacted prior to placing another 2-foot layer over the previous lift. If, upon receipt, ash is not ready to be spread and compacted due to moisture content, the ash is spread in an area next to the current working area and covered. Later, after it has dried, the ash will be re-spread and compacted prior to placing another lift of ash over it. The ash residue is covered at the end of each operating day; no residue is uncovered overnight. (Ex. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*.)

32. Daily cover materials must comply with the applicable requirements outlined in state regulations. See Regs., Conn. State Agencies §22a-209-7(1)(2). The CRRA currently uses a combination of clean soils and/or tarps for daily cover. Foams, polluted soils or other alternate means of daily or intermediate cover may be used, pending prior approval of the DEP. As defined in state regulations, “polluted soils” are soils that are affected by a release or a substance at a concentration above analytical detection limits. See Regs., Conn. State Agencies §22a-133k-1(45). To make a determination on a specific request for the use of such soils as a

- cover alternative, the DEP would require that a plan be submitted for review and approval that includes specific information on the nature and management of the polluted soils to be used as alternate cover materials. Hazardous wastes are not included in these soils.³ (Ex. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*; test. C. Stopper 11/29/00, pp. 72-73, 12/1/00, pp.28-35, 165-167.)
33. Drainage is controlled through the routing of stormwater on and around the active landfill. Stormwater is diverted away from the operating landfill through the use of temporary diversion methods such as hay bales, silt erosion fences and berms. Permanent measures include diversion terraces positioned across finished slopes of the landfill or collection channels to convey the stormwater to natural drainage areas. As portions of the Landfill reach permitted elevations, seeding for grass cover is applied. All drainage structures are maintained to ensure their hydraulic efficiency and are inspected when necessary to keep them free of objects or other impediments that could restrict or stop flow. Damaged structures are repaired promptly. (Ex. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*.)
34. Leachate is controlled through the management practices of the Landfill, which are designed to minimize infiltration of water into the landfill areas both during operations and after closure. The size and extent of active operating areas are kept to a minimum, and fill to final grade in those areas is accomplished as quickly as possible. Active and completed areas are covered and graded as soon

³ State and federal law do not allow any hazardous waste to be deposited at any municipal solid waste landfill. 42 U.S.C.A. §6924 (*Solid Waste Disposal Act*); See RCSA §22a-209-1.

- as possible to promote runoff, and completed areas are seeded quickly. The lined ash area is equipped with a primary and secondary leachate collection system. In addition, there is a containment system around the entire Landfill. These controls, as well as regular inspection and maintenance, keep leachate controlled and contained. (Ex. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*; test. C. Stopper 11/28/00, pp. 32-37.)
35. Odors at the Landfill are generated either through landfill gas generated during the decomposition of certain kinds of buried refuse emanating from the landfill, directly from the receipt of certain wastes as they are received and spread at the landfill, or from leachate seeps. Odor controls, including a gas collection system, are provided for at the Landfill. Ash residue is inert and inorganic as all biodegradable organic materials have been destroyed during incineration. Ash residue does not emit gas and therefore does not generate strong, objectionable or even noticeable odors. (Ex. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*; test, C. Stopper 11/29/00, pp.78-79.)
36. Dust control is maintained at all times as required to keep access roads in a clean and dust free condition. A water truck with a sprinkler bar is used on an as-needed basis along the access roads and working area. A street sweeper is utilized on an as-needed basis along all on-site and on the main off-site paved access road (Leibert Road) leading to the Landfill entrance. The nature of the ash residue coming to the Phase I facility and the way in which it is managed on-site provide very little opportunity for dust emissions. The ash comes to the facility with high moisture content, hardens into a cement-like material when deposited,

- and is covered daily. It therefore generates insignificant quantities of dust or other air pollutants. (Ex. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*; test. C. Stopper 11/28/00, p.38-39, 41-42, 11/29/00, pp. 72-74.)
37. Birds and other vectors are discouraged from the landfill Site through various operational controls (i.e. rapid covering of residue). Birds are kept from the Site through the use of cannons, noisemakers, and other devices. Personnel, equipped with noisemakers such as starting pistols, are stationed at the working face of the landfill on an as needed basis. (Ex APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*.)
38. A chain-link fence along the south, west, and north side of the landfill provides security at the Site. The flood control dike controls access from the east. Access to the Site is normally provided through a gate near the scale house at the southwest corner of the Site. The gate is locked during the hours when the Landfill is closed. Access to the Site for emergency purposes is also available through a locked gate at the northwestern edge of the Site from Weston Street. (Exs. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*, 14.)
39. Emergency procedures are in place for events such as accidents and fire. The likelihood of fires at the Landfill is minimal primarily due to the nature of the waste accepted. Most waste accepted is either bulky waste or ash residue, which either contains little combustible material. The waste has been inspected prior to loading and transport to the Landfill. The most likely source of fires at the

Landfill would be either from litter coming in contact with hot vehicle parts or from an underground landfill fire. The chance of fire will be minimized by prompt compaction of all bulky wastes and complete daily cover of all waste, separating and extinguishing loads that may pose a fire hazard, and keeping an adequate supply of cover material stockpiled at all times near the working face of the landfill. Water for fire protection is available from the MDC hydrants in the vicinity of the scale house. Fire extinguishers are available on all equipment and at the scale house, and are available at the maintenance facility. If a fire does occur at the Landfill, the Hartford Fire and Public Works Departments and the Connecticut DEP will be notified immediately. Any leachate as a result of a fire would be collected in the active portions of the lined ash area via the leachate collection system constructed over the geomembrane liner system. The collected leachate, pretreated using a pH adjustment, would then be discharged to the MDC-Hartford Sewage Treatment Facility via a sanitary sewer on Leibert Road. (Ex. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*.)

F

The Proposed Permit Modifications

40. The proposed modifications will relocate the disposal of MSW combustion ash residue planned for disposal at the previously authorized Phase II ash residue facility, which has not been constructed, to the Phase I ash residue facility by increasing the final elevation of the Phase I ash residue area by forty feet. (Exs. APP- 1, 10, 11; exs. DEP-1, 10.)

41. Authorization for the CRRA to construct and operate the Phase II ash residue facility will be rescinded if the proposed permit modifications are granted. Construction and development of the Phase II facility would disturb viable wetlands and associated habitat and vegetation located to the north of the Phase I facility. (Exs. DEP-1, 2, 10, 15; test. C. Stopper 11/29/00, pp.50-53.)
42. The vertical expansion of the Phase I lined ash area will increase the capacity of that facility by 575,000 cubic yards, but will result in the same total volume of capacity that was approved in the original 1994 DON, approximately 1.2 million cubic yards for the Phase I and Phase II configuration. (Ex. APP-4; exs. DEP-9,10,15.)
43. The reconfiguration will place ash residue on top of the existing Phase I ash residue facility. The existing double liner system will be extended up the north face of the historical landfill. The reconfiguration will maintain a side slope grade of 1 vertical to 3 horizontal, and all ash residue will be deposited within the confines of the double liner system. All leachate from the Phase I facility will continue to be directed to the existing leachate collection system. The proposed modification to the Phase I facility will not require any design changes to the GWCCS because it will not result in substantial changes in the hydrogeologic behaviors of the Site. (Ex. APP-1, Volume II, Appendix C, *Revised Operations and Management Plan*; ex. DEP-2; test. C. Stopper 11/29/00, p.49; test. K. Feathers 12/4/00, p. 113, test. D. McKeegan 12/4/00, pp. 132-133.)
44. Because the modifications to Permit No. 064-4(L) will not result in an increase in approved ash disposal capacity, there is no requirement for a new or revised

DON. The proposed modifications will not result in an overall increase in permitted capacity, but rather a reconfiguration of the landform. If the approved capacity is used in the Phase I area, any additional capacity requested for the Phase II area will require a full DON process and approval. (Exs. DEP-10, 15; test. O. Inglese 12/4/00, p. 109.)

45. Permit No. LF0000014 will be modified to incorporate the proposed changes in the Landfill operations and management plan associated with the increase in the final elevation of the facility. Additional conditions in this Permit will include new provisions for the monitoring and reporting of leachate in the Phase I facility. (Ex. DEP-3; test. K. Feathers 12/4/00, pp. 114-116.)

G

DEP Review and Determinations

Solid Waste Permit

46. During its review of the application, the DEP Bureau of Waste Management, Engineering and Enforcement Division, (WEED) was concerned that the additional ash on top of the Phase I facility could potentially depress the leachate collection and removal system resulting in less than optimum flow and lead to ponding of leachate on the liner system. (Ex. DEP-15; test. D. McKeegan 12/4/00, p. 130-132.)
47. In response to WEED's concern, the applicant conducted geotechnical evaluations to demonstrate that the increase to the maximum ash elevation of the Phase I facility will have no adverse effects on the liner integrity, the leachate collection system and the GWCCS. The applicant demonstrated that although settlement

over time will cause the leachate system to become flatter, it will not affect the long-term ability of the system to properly drain the liner or alter the nature of the leachate. An evaluation conducted by TRC Environmental Corporation on behalf of the applicant also indicated that the majority of the landfill settlement will occur after the landfill closure and capping when leachate generation is minimized and foundation grades are less critical to the performance of the overall liner system. WEED determined that this issue does not warrant further technical review at this time. (Exs. APP-1, 2, Volumes II, Appendices D and C, *Geotechnical Report*; ex. DEP-15; test. 12/4/00 D. McKeegan, p. 131, K. Feathers, pp. 116-117.)

48. WEED recommended that the permit modification be issued for the proposed activity and that the draft permit be amended, as necessary, to require that a party independent of the landfill operator conduct the quarterly landfill inspections. (Exs. DEP-2,15.)

Groundwater Discharge Permit

49. The DEP conducted a technical review of the application pursuant to the Regulations of Connecticut State Agencies 22a-430-4(e) to determine if the discharge will cause pollution of the waters of the state or whether any proposed system to treat the discharge will protect the waters of the state from pollution. Specifically, Staff reviewed the existing discharge permit and evaluated the proposed permit modification for a vertical expansion in Phase I lined ash area to determine how it would affect the nature of the permitted discharge. (Ex. DEP-16; test. K. Feathers 12/4/00, pp. 110-119.)

50. Technical review focused on whether the quantity or quality of the leachate discharge would change as a result of the proposed increase in the final elevation and if the current leachate to groundwater system would be affected. The quantity of leachate is associated with the area of the landfill that does not have a final cover and is exposed to rainfall that infiltrates the waste. The draft permit modifications require the applicant to operate the Phase I facility in accordance with a revised Operations and Management Plan. Under this plan, a temporary cover system over inactive areas will limit the areas exposed to rainfall at any time and an anchored layer of geotextile material will be installed around the toe of the Phase I facility and over the layer of crushed stone associated with the leachate collection system. This material will act as a filter to prevent fine particles from entering and clogging the leachate collection system. The permit will require that the applicant monitor leachate quality over time. (Ex APP-1, Volume II, Appendix C, *Ground Water Flow Control System Operation and Maintenance Documents*; exs. DEP-16, 17; test. K. Feathers 12/4/00, pp. 114-116.)
51. The DEP review concluded that there would be no substantial change in leachate quantity because the area of infiltration will not change. The DEP concluded that the applicant is not proposing to change the nature of the type of waste material placed in the lined ash area and that the leachate quality is not expected to change. In addition, any discharge will not affect any public water supplies as the area is served by a municipal system and there are no supply wells in the area. (Ex. APP-8; exs. DEP-1, 16; test. K. Feathers 12/4/00, p. 113-114, 117-118.)

52. A proposed permit modification requires that leachate quality monitoring data from the leachate collection system currently in place under the requirements of Permit No. SP0001412 will be evaluated to verify that leachate quality does not change. (Ex. DEP-16; test. K. Feathers 12/4/00, pp.115-116.)
53. The current system to control and treat the leachate discharge to groundwater includes a perimeter confining slurry wall and a groundwater flow control system that includes four groundwater withdrawal wells. Leachate from the Phase I lined ash area enters a constructed leachate collection system, but would enter the groundwater flow control and collection system if the leachate collection system failed. The DEP concluded that there will be no substantial change in the nature or operation of the perimeter confining slurry wall and groundwater flow control system as a result of increasing the final elevation of the Phase I lined ash area. (Ex. DEP-16; test. K. Feathers 12/4/00, pp. 116-117.)

H

Compliance History

54. When reviewing permit applications, Staff considers the compliance history of an applicant in determining whether, or under what conditions, to issue a permit. An *Applicant Compliance Information* form must be completed as part of the DEP application package. Pursuant to §22a-6(m), the Commissioner reviews compliance history when deciding whether to issue or modify a permit. See also Regs., Conn. State Agencies section 22a-209-4(d)(1)(D). (Exs. APP-1, 2, Volumes I, Attachment B, C, *Applicant Compliance Information*; ex. DEP-14;

Environmental Compliance History Policy, Department of Environmental Protection, October 16, 2000.)

55. Staff of the DEP Bureau of Waste Management reviewed the compliance history of the applicant to determine if the applicant has repeatedly violated pertinent statutes, regulations, permit terms or conditions at any solid waste facilities. The Bureau of Waste Management asked the Bureaus of Air and Water Management to review their files as well. (Ex. DEP-14.)
56. The Staff's review revealed that most of the actions involving the applicant were Notices of Violation and were generally corrected in a timely manner. One recent incident did result in the issuance of two consent orders with penalties regarding gas emissions at the Shelton Landfill. Even though Staff believes this was a serious incident, it evaluated the applicant's entire record in light of the considerations listed in the DEP *Environmental Compliance History Policy*, and decided this should not preclude the applicant from receiving the current permit modifications. Staff concluded the although applicant's past compliance history reveals a pattern of noncompliance and recalcitrance to comply with certain environmental regulations, particularly storm water monitoring, the applicant has addressed most of the actions promptly. Staff did recommend that consideration be given to permit conditions obligating the applicant to retain a third party consultant to oversee compliance. (Ex. DEP-14; test. 12/4/00, D. McKeegan, pp. 126-129, K. Feathers, p. 136, O. Inglese, p. 136-137; test. 12/8/00, D. McKeegan, pp. 140-146, O. Inglese, pp.149-150; *Environmental Compliance History Policy*, Connecticut Department of Environmental Protection, October 16, 2000.)

57. The Staff's report on compliance history explained that previous reviews of the applicant's compliance history have noted that the compliance information supplied by the applicant with regard to all its operated facilities has been found to be insufficient as it has not always included case compliance/closure information and dates. Although this issue was apparently rectified in July, 1999, with the submittal of an amended compliance history, it is still apparent from recent submittals that once again the applicant has not provided complete enforcement action closure information.(Ex. DEP-14.)
58. The applicant presented rebuttal testimony clarifying the NOV's and other DEP actions. The testimony indicated that a substantial number of issues raised in the actions have been addressed and that actions currently outstanding are in process of being complied with. The applicant also submitted compliance history information with its application package. (Ex. APP-1, 2, Volumes I, Attachment B, C, *Applicant Compliance Information*; test. 12/12/00 D. Brown, pp. 148-168.)

I

Environmental Equity

59. In 1993, the DEP issued its *Environmental Equity Policy*, which provides, in pertinent part, that "...no segment of the population should, because of its racial or economic makeup, bear a disproportionate share of the risks and consequences of environmental pollution or be denied equal access to environmental benefits." In response to this policy, the DEP created the Environmental Equity Program, which incorporates aspects of environmental equity into DEP program development, policy-making and regulatory activities, including: increasing

- public participation in the agency's decision-making process; enhancing public participation in administrative proceedings; and educating the public on DEP regulations, policies and procedures. (*Environmental Equity Policy*, Connecticut Department of Environmental Protection, December 17, 1993.)
60. Staff reviewing the application consulted with staff of the Environmental Equity Program (Equity Program) regarding the CRRA application. In a September 8, 2000 memorandum to Staff, Edith Pestana, Administrator of the Equity Program, identified and provided a list of environmental equity tasks for the applicant to undertake in order to meet environmental equity requirements consistent with DEP policy. These included meeting with two Hartford groups, the Hartford Neighborhood Environmental Project and the HEJN Steering Committee, to discuss the Landfill permit application and to plan to hold a public meeting. CRRA was also directed to answer questions from these groups and distribute written answers to them for distribution in their mailings to their members. CRRA was also instructed to announce a public informational meeting through newspapers and radio stations, including those that serve minority communities. (Ex. APP-17; ex. DEP-13; test. 12/4/00 O. Inglese, pp. 105-106.)
61. In an October 10, 2000 letter, Staff requested that the CRRA complete the tasks outlined in Ms. Pestana's memo. The letter indicated Staff's position that the CRRA demonstrate how it had met its responsibility of communicating, directly and indirectly, with the local community on the proposed expansion. Staff noted that it would require full identification of potentially interested community groups

- and individuals. A copy of Ms. Pestana's memorandum was enclosed. (Ex. APP-17; ex. DEP-13.)
62. On October 27, 2000, DEP Staff had published in *The Hartford Courant* legal notice, notice of public hearing and notice of the application. Staff also had published a *Notice of Tentative Determination* to approve the modification to the Phase I ash residue facility. (Ex. APP-9.)
63. The first public hearing on the application was held on November 28, 2000, at the Connecticut Department of Environmental Protection, 79 Elm Street, Hartford, Connecticut. Additional public hearings were held on November 29, 2000 and December 12, 2000 at the same location. (Ex. APP-9.)
64. A November 27, 2000 letter to Staff from the CRRA outlined its activities since Ms. Pestana's memo, and described some of the historic and continuing communications by CRRA with the community regarding the Hartford Landfill. The recent activities included meetings with the community groups listed in that memo, and media outreach such as press releases and advertisements regarding the pending application and hearings on that application. Written responses to questions about the expansion were provided to the Intervenors and others as directed in the memo. The CRRA coordinated a mailing from the HEJN to 800 individuals and organizations. The CRRA also held a public information meeting about the expansion on December 4, 2000 in Hartford City Hall, and its representatives were available one-hour before the November 28 and 29 hearings to answer questions and take comments. The CRRA employs a communications coordinator to implement a regular communication program. This

- communication effort includes the issuance of press releases and advertisements in the Hartford media, meetings with community groups, and interviews to the media to proactively educate the public about the Landfill. These communications also included the publishing of notices and announcements during and after the hearing on the pending application. (Exs. APP-16, 17, 21, 22, 23; test. B. Flaherty 11/29/00, pp.20-34, 12/1/00, pp. 40-86, 89-92, 12/20/00, pp. 10-26.)
65. Staff reviewed the efforts of CRRA, and concluded that the applicant substantially implemented the environmental equity tasks as outlined in Ms. Pestana's memo. Staff considers an applicant's community outreach efforts as part of the application procedure. (Test. O. Inglese 12/4/00, pp. 104-106, 145, 12/8/00, pp. 17-19, 12/20/00, p. 68; test. D. McKeegan 12/4/00, p.122.)
66. The Intervenors SOS and HEJN, certain sworn speakers, and written comments submitted by the public and members of the Intervenor SOS introduced information on the alleged environmental risks posed by the Hartford Landfill and the impact of the operation of that facility on the health and life of the residents living near the Landfill and in the City of Hartford. These impacts include the effects of truck traffic travelling to the Landfill. SOS, HEJN and certain sworn speakers also noted that a high percentage of the State's minority population live in and around the City of Hartford, and that the City has a relatively large number of industrial and waste management facilities. SOS, HEJN and certain City residents contend that the Hartford Landfill, and any expansion of the Landfill, does and will cause the minority population of the City to bear a disproportionate

- share of the risks and consequences of environmental pollution. They further allege that they are and will be denied equal access to environmental benefits. The Intervenor One/Chane maintains that it was initially opposed to this proposed expansion due to concerns about health, safety and environmental impacts but that it has changed its position to one of support for the proposal because the CRRA has implemented improvements at the Landfill Site. (Ex. INT-HEJN-2, 2A, 4, 5, 6, 8; ex. INT-One/Chane-2; exs. INT-SOS –1-3; test. H. Nixon 11/28/00, pp. 104-116; test. M. Mitchell 12/13/00, pp. 45-109, 126-127.)
67. Staff evaluated the health and other risks potentially posed by the proposed modification to the Phase I ash residue facility at the Landfill under the statutes and regulations that protect human health and the environment. Staff concluded that the expansion would pose no adverse health or environmental impacts. Staff also concluded that the expansion would not result in an increase in traffic to the facility. Staff determined that the CRRA had successfully implemented the DEP environmental equity policy. (Ex. DEP-1; test. O. Inglese 12/4/00, pp. 104-106, 145-160, 12/8/00, pp. 17-19, 23-31, 166-169, 12/20/00, p. 63; test. D. McKeegan 12/4/00, p. 125.)
68. On February 15, 1996, the Commissioner of the DEP issued a *Final Decision* (1996 Final Decision) concerning several applications filed by the CRRA to modify existing permits, including Permit No. 064-4(L), the solid waste permit at issue in this proceeding. At the time, then-Intervenor One/Chane claimed that the *Proposed Final Decision* to approve the permits violated the equal protection provisions of the state and federal constitutions. In rejecting that claim, the

Commissioner found that no evidence had been produced to prove that racial discrimination was a motivating factor in the decision to grant the permit to CRRA. In addition, the Commissioner noted that there was no proof of intentional discrimination or even that the impact of the decision bore more heavily on one race. *In Re: Connecticut Resources Recovery Authority Applications for Permits for a Lined Ash Landfill in the City of Hartford*, February 15, 1996. (Exs. APP-4, 5; test. O. Inglese 12/4/00, pp. 147-160.)

J

Reasonable and Prudent Alternatives

69. The Intervenors HEJN, SOS and several sworn speakers propose various alternatives to the proposed expansion of the Phase I facility. These include the shipping of the ash residue identified for the Hartford facility to a similar facility in Putnam, shipping the waste out-of-state, and requiring the CRRA to revive its efforts at producing a recyclable ash product. The CRRA did actively pursue and investigate recyclable ash disposal options, including the testing of samples of ash that would be capable of being recycled. CRRA is not actively pursuing this option at this time as it has concluded that a permit for such a venture would not be possible at this time, and questions continue as to the possible ability to market the recycled ash. (Ex. APP-4; test. D. Brown 11/29/00, p.140, 12/1/00, pp. 169-177, 12/20/00, pp. 92-94, 97.)

III

CONCLUSIONS OF LAW

A

INTRODUCTION

The exhaustive process in this matter, evidenced by the lengthy recitation of facts above, should not and does not mask the clear and straightforward nature of the issues that I must address in making my recommendation to the Commissioner. The applicant CRRA holds numerous permits to operate and manage the Hartford Landfill and has applied to the DEP for a modification of two of those permits.

The first application seeks to modify a solid waste permit to allow the applicant to utilize previously approved capacity for disposal of combustion ash residue by expanding the Phase I ash facility by 40 feet to accommodate 575,000 cubic feet of ash. This expansion will prohibit the applicant from using the Phase II facility for ash disposal, but will not increase the total disposal capacity of 1.2 million cubic feet that was approved by the DEP, and on which the DEP has issued a *Determination of Need*, when it issued a permit for the Phase I and II facilities.

The second proposed modification seeks changes to a groundwater discharge permit held by the applicant. Specifically, the applicant seeks to modify this permit to accommodate the proposed changes in landfill operations and management associated with reconfigured Phase I ash area and the final elevation of the facility. The modification will also include provisions for the monitoring and reporting of leachate.

In making my decision, I am bound by the statutory and regulatory standards that guide this agency's decisions as to whether a permit should be granted or denied, and by my conclusions of law on other relevant issues. I acknowledge the concerns of the parties to this proceeding who have raised serious and important issues, and have given these issues my attention and deliberation. However, my decision must be and is steered by conclusions of law based on facts found, and by the impartial guidance found in statutes and regulations. Issues that are not germane to either this proposed decision or the Commissioner's final decision on the permit modifications will not be addressed herein.

B

STATUTES AND REGULATIONS

Management of the State's air, land and water resources is the responsibility of the DEP, and all matters relating to the preservation and protection of these natural resources are therefore within its jurisdiction. General Statutes §§22a-1, 22a-2. The statutes enacted for the management of solid waste, §22a-207 *et seq.*, and for the protection of the waters of the state, §22a-430 *et. seq.*, and relevant regulations, are but a part of the comprehensive body of laws that allow the Department to fulfill its responsibilities.

The standards that guide my decision are found in General Statutes §§22a-208(a) and 22a-430, and the relevant regulations within §§22a-209-1 *et. seq.* and 22a-430-1 *et. seq.* The authority of the Commissioner to regulate solid waste facilities to protect health and safety, and to minimize air and water pollution and other nuisances, arises from these statutes and regulations. These standards guided the decision of this agency to grant the

1996 permit to the applicant to construct and operate the Phase I ash residue facility. The considerations that were the components of that decision also direct this decision on the modification of that permit.

1

The Proposed Modifications to Solid Waste Permit No. 064-4(L) Are Consistent with and Satisfy All Applicable Provisions of General Statutes §22a-208 and §22a-209-14 of the Regs., Conn. State Agencies

The record in this matter demonstrates that the proposed modifications to the solid waste permit satisfy all statutory and regulatory conditions. Section 22a-208(a) gives the Commissioner the responsibility to examine all existing and planned solid waste facilities and provide for their proper planning, design, construction, modification, and operation. The Commissioner does this in a manner that insures against pollution of the waters of the state, prevents the harboring of vectors, prevents fire and explosion and minimizes the emission of objectionable odors, dust or other pollutants so that the health, safety, and welfare of the people of the state shall be safeguarded and enhanced and the natural resources and environment of the state may be conserved, improved and protected. Decisions based on the guidance of §22a-208(a) also enhance the goals of the proposed *Solid Waste Management Plan* for the State of Connecticut.

a

General Statutes §22a-208a

Section 208a(a) provides that “The Commissioner...may issue, deny, modify...revoke or transfer a permit, under such conditions as he may prescribe...” See also §22a-6(a)(4). This discretionary authority is circumscribed, however, by additional language in the statute that provides: “In making a decision to grant or deny a permit...

including a verticallandfill expansion, the commissioner shall consider the character of the neighborhood in which such facility is located and may impose requirements for hours and routes of truck traffic, security and fencing and for measures to prevent the blowing of dust and debris and to minimize insects, rodents and odors.”§22a-208a(a).

(1)
Pollution of the Waters of the State

The Phase I facility as it exists today does not cause pollution to the waters of the State. The evidence in the record demonstrates that the proposed 40-foot increase in the elevation of this facility will not change this status and that the Phase I ash residue facility will continue to operate to protect against pollution to the waters of the State.

Leachate is controlled through the management practices of the applicant CRRA, which are designed to minimize the infiltration of water into the Landfill areas during operations and after closure. A groundwater flow collection and control system (GWCCS) has been installed that is designed to contain all leachate from the Phase I facility in the event of damage to its double-liner system. The GWCCS encloses the unlined portion of the Landfill as well as the double-lined Phase I ash area. Consisting of a clay slurry wall surrounding the Site on three sides, with a fourth side bordered by a flood control dike that separates the Site from the Connecticut River, the GWCCS also includes a groundwater monitoring, pumping and treatment system. The GWCCS collects, pumps, neutralizes, and discharges groundwater to the MDC-Hartford Sewage Treatment Facility. The proposed changes will not adversely impact this GWCCS and it will continue to serve to protect against water pollution.

(2)
Protection Against the Harboring of Vectors

The modification to the Phase I will not interfere with the measures the CRRA presently takes to prevent the harboring of vectors at the Landfill. Vectors include animals typically thought of as troublesome, such as rats, rodents and birds that may transmit pathogens that carry disease. Although the ash residue that is and will be disposed of in the Phase I facility does not attract vectors because it is inert and inorganic, the operations and management plan at the Landfill does include controls for vectors at the Site. As the Phase I facility is part of the overall Landfill Site, these controls are worth noting. Proper daily operations include rapid covering of residues and other operational controls. Birds are prevented from using the Site to feed or roost through the use of cannons and other devices to scare them away.

(3)
Prevention of Fire and Explosion

The chance of fire or explosion at the Phase I facility is, and will continue to be, minimal due to the nature of the waste accepted. Because ash is inert and inorganic, it neither burns nor produces any combustible gases that could lead to an explosion. Nevertheless, and for the same reasons stated above, the applicant's fire protection procedures and operation and management of the Landfill are worth noting. There is adequate evidence that measures such as prompt compaction of bulky wastes and complete daily cover of all wastes minimize the chances of fire. Additional practices include extinguishing any deliveries to the Landfill that have any tendency for fire and the maintenance of an adequate supply of cover material at all times near the working faces of the Landfill. In addition, water for fire protection and fire extinguishers is

available at all times. Finally, the applicant will notify the Hartford Fire and Public Works Departments and the DEP if a fire does occur at the Landfill.

(4)
***Minimize the Emission of Objectionable Odors,
Dust or other Pollutants***

The increased elevation of the Phase I facility will not increase the emission of objectionable odors, dust or other pollutants from the Landfill. Because ash is inorganic, it does not generate any objectionable, or even noticeable, odors. Because the consistency of the ash brought to the Phase I facility is similar to wet concrete, it will not generate significant quantities of dust or other air pollutants. Again, the operations and management of the Landfill are notable. Odor controls, including a gas collection system, are in place at the Site. Dust control is maintained to keep access roads clean and dust free. Waste is covered daily with soils or alternate covers such as tarps or approved alternate materials. The ash to be disposed of at the Phase I facility will also be covered daily, and as noted, the characteristics of ash prevent it from being the source of dust or other air pollutants.

(5)
***Safeguarding, Enhancing the Health, Safety, and Welfare of the People of the State
and
Conserving, Improving, Protecting the Natural Resources and Environment of the
State***

Nothing in the record, and no evidence presented during the hearings, demonstrated that a decision to modify the solid waste permit and allow the applicant to reconfigure the Phase I and II ash areas by increasing the elevation of Phase I and eliminating Phase II would endanger the health, safety and welfare of the people of the State nor harm the State's natural resources and its environment. A decision to grant the

proposed permit modification will not contravene the 1996 decision of the Commissioner to modify the applicant's solid waste permit. In making that decision, the Commissioner determined that the modifications would not impact the health, safety and welfare of the State's citizens, and that they would not circumscribe his responsibility to conserve, improve and protect the natural resources and the environment of the State.

No evidence demonstrates that the presently proposed modifications would change the reasoning that supported the 1996 decision. In fact, the present proposed modifications would further benefit and reduce the impact on the environment by foregoing construction of the already approved Phase II area where viable wetlands are located. Construction of the Phase II facility would extend the lined ash facilities and the disposal of ash an additional 14 acres to the north. This construction and operation would destroy portions of the existing wetlands, causing permanent damage to the extant vegetation and wildlife habitat. The elimination of the Phase II facility also prevents the need to construct access roads and other structures that may be necessary to accommodate that facility. Finally, the horizontal footprint of the facility will remain as it is, and will not grow closer to the surrounding neighborhoods. If the applicant wishes to use any part of the area that was to be the Phase II facility in the future, a new application and approval process must take place.

(6)
Character of the Neighborhood
Truck Traffic Routes

In making a decision to modify a permit, the Commissioner must consider the character of the neighborhood in which such facility is located. The Commissioner may impose requirements for hours and routes of truck traffic, security and fencing and for

measures to prevent the blowing of dust and debris and to minimize insects, rodents and odors.” §22a-208a(a). The Commissioner may take these actions outlined above in response to his consideration of the neighborhood in which the facility is located. Security measures, including fencing, and controls to prevent the blowing of dust and debris and to minimize vectors and odors are already in place at the Landfill. Hours of operation, which involve the delivery of ash to the facility, are reasonable. Testimony was introduced that trucks use Interstate-91 and Jennings and Liebert Roads to access the Landfill.

I will recommend that a permit condition be included in the solid waste permit modification that will require the applicant to notify trucks delivering ash to the Phase I facility that they must use this prescribed route for access to the Landfill, and that use of any other streets or roadways for access, except in emergencies or other unavoidable circumstances, is prohibited.

b

Regulations, Conn. State Agencies §22a-209-14

The regulatory provisions of §22a-209-14 provide design and construction standards for lined ash residue disposal facilities. The additional 40 feet of ash residue to be deposited in the Phase I facility will be structurally accommodated by extending the existing double liner system up the north face of the area of the Landfill known as the historical landfill. The CRRA will design and construct this extension of the liner system in accordance with DEP-approved technical submissions and engineering drawings. All ash will continue to be deposited within the boundaries of the double liner system so that all leachate from the Phase I facility will continue to be directed to the existing, permitted

collection and control system. No evidence was presented to demonstrate that this addition to the double liner or the additional load on the leachate collection and control system will impact their ability to function properly. The requirements of the regulation will continue to be met under the Permit if modified as requested by the applicant.

2

***The Proposed Modifications to Groundwater Discharge Permit No. LF0000014
Are Consistent with and Satisfy All Applicable Provisions of General Statutes §22a-430
and Applicable Sections of §22a-430-1, Regs., Conn. State Agencies***

a

General Statutes §22a-430

To approve a water discharge permit application, §22a-430 provides that “the commissioner shall make a final determination... that ...such discharge would not cause pollution of any of the waters of the state, in which case he shall issue a permit for such discharge.” The statute and relevant sections of the regulations also require that the discharge must not endanger human health or the environment, and thus be consistent with the *Connecticut Water Quality Standards* and the provisions of the federal *Clean Water Act*. §22a-430(a), (b), (i)(I); Regs., Conn. State Agencies §22a-430-4(p)(2).

No evidence has been introduced to prove that the modification of the applicant’s existing groundwater discharge permit will cause pollution of any waters of the state. There is also no evidence that the discharge will endanger human health or the environment, and therefore inconsistent with the *Connecticut Water Quality Standards* and the provisions of the *Clean Water Act*.

As demonstrated by the evidence presented, leachate quality and quantity will not be significantly impacted by the reconfiguration of the Phase I facility to extend its height by 40 feet. There will be no change in the operation of the groundwater collection and control system as a result of increasing the final elevation of the Phase I ash disposal area. The permit modifications will require extensive leachate sampling, monitoring, recording and reporting.

As with the solid waste permit, no evidence has been introduced that demonstrates a need to change the reasoning that supported the 1996 decision of the Commissioner to modify the applicant's water discharge permit. In making that decision, the Commissioner determined that the modifications would not impact the health, safety and welfare of the State's citizens, and that they would not circumscribe his responsibility to conserve, improve and protect the natural resources and the environment of the State.

No evidence demonstrates that the presently proposed modifications would change conclusions of the Commissioner in his 1996 decision. In that decision, the Commissioner expressly found that the Site location, double liner system and groundwater monitoring and control systems would serve to protect the waters of the State from unreasonable pollution. Nothing presented herein directs a different conclusion, in fact, the evidence strengthens this conclusion. The waters of the state will continue to be protected under the provisions of the groundwater discharge permit held by the applicant, even if modified as requested herein.

b

Regulations, Connecticut State Agencies §22a-430-1 et. seq.

The evidence presented below confirms that even in the worst case, leachate discharge would not pollute the waters of the State. A required evaluation of the predicted impacts of a leachate discharge from the Site under certain circumstances⁴ demonstrates that even without the leachate collection or groundwater collection and control systems, the discharge of water will neither pollute any receiving surface water nor prohibit the attainment of water classification goals consistent with the State’s water quality standards. See Regs., Conn. State Agencies §22a-430-4(c)(20)(E)(vii).

C

DETERMINATION OF NEED

General Statutes §22a-208d requires that the Commissioner make a written determination of need when issuing a permit under §22a-208a to construct or expand waste facilities, including facilities for the disposal of ash residue generated by resources recovery facilities. A careful reading of the statute makes clear its intent. Section 22a-208d(a) provides that the commissioner must make a determination that “such facility or disposal area is necessary to meet the solid waste disposal needs of the state and will not result in substantial excess *capacity* of resources recovery facilities, disposal areas or mixed municipal solid waste composting facilities.” (Emphasis added.)

⁴ This evaluation was based on: 1) the absence of any of the water pollution control systems; 2) worst-case leachate quality based on the highest parameter concentrations found in the leachate; 3) no attenuation of leachate pollutants; 4) conservatively high leachate flow rates; and 5) conservatively low flow conditions in the Connecticut River. See Regs., Conn. State Agencies §22a-430-4(c)(20)(E)(iv).

The Commissioner issued such a determination when he authorized the Phase I and Phase II disposal capacity of approximately 1.2 million cubic feet at the Landfill. The Commissioner found that the proposed Phase I and Phase II facilities were necessary to meet the disposal needs of the State. Additionally, the Commissioner concluded that the proposed disposal capacity of approximately 1.2 million cubic feet would not result in excess disposal capacity.

The proposed permit modification will expand the height of the Phase I disposal area and eliminate the Phase II facility. The modification will not, as has been described numerous times herein, increase the 1.2 million cubic foot capacity authorized for the Phase I and Phase II lined ash disposal area. It is clear that the intent of the determination of need requirement was to ensure that any construction or expansion of disposal *capacity* will not create an excess of capacity in the State. The expanded height of the Phase I facility will create such an excess.

D

COMPLIANCE HISTORY

Section 22a-6m of the General Statutes provides that the Commissioner may deny an application for modification of a permit where he finds that the applicant's compliance record "evidences a pattern or practice of noncompliance which demonstrates the applicant's unwillingness or inability to achieve and maintain compliance with the terms and conditions of the permit....." §22a-6m(a). DEP Staff reviewed the applicant's compliance history as part of its review of its application for these permit modifications and concluded that the applicant's compliance history should not preclude the issuance of

the permit modifications. Extensive evidence in the form of written documentation, direct testimony, cross-examination, redirect and rebuttal testimony was provided at the hearing. No evidence was introduced that implicates the conclusions of Staff.

No evidence was presented to demonstrate that the applicant's compliance history shows a pattern of willful noncompliance with environmental laws. The testimony revealed that at best, some of the violations were due to practices of vendors or employee error or the vagrancies typical in any industrial operation. At worst, some violations were due to inattention of the applicant and recalcitrance to always act promptly to resolve a violation as directed by the DEP and come into full compliance with all statutory and regulatory requirements. In conclusion, however, nothing in the record or as presented during the proceedings would suggest a pattern of significant willful noncompliance with environmental laws so that these permit modifications should be denied.

Nevertheless, as authorized by statute, the Commissioner may include conditions in these permit modifications to address issues such as those raised by the examination of the applicant's compliance history. I will therefore recommend that the Commissioner adopt two conditions put forth by Staff for inclusion in these permit modifications. The first will require the applicant to retain a third party to oversee Site compliance. The second will require the applicant to be more diligent in Site operation, maintenance and, when retaining outside vendors, to conduct quarterly inspections on quality control.

E

AIR PERMIT

The activities proposed by the applicant do not require the an air permit. The addition of 40 feet of ash residue on top of the Phase I ash residue does not involve an increase in design capacity and triggers no requirement to obtain an air permit. Section 22a-174-1(4) of the Regulations of Connecticut State Agencies defines “air pollution” as “the presence in the outdoor atmosphere of one or more *air pollutants* or any combination thereof in such quantities and of such characteristics and duration as to be, or be likely to be, injurious to public welfare, to the health of human, plant or animal life, or to property, or as unreasonably to interfere with the enjoyment of life and property.” The evidence presented during the hearing demonstrated that ash residue does not produce air emissions. Indeed, ash produces very little dust emissions or other significant particulates into the air. Ash residue therefore does not contribute to, and is not a potential source of, air pollution.

F

ALTERNATIVES

The Intervenors SOS and HEJN have intervened under the provisions of General Statutes §22a-19(a). Under this statute, intervenors allege that a proceeding or action “involves conduct which has, or which is reasonably likely to have, the effect of unreasonably polluting, impairing or destroying the public trust in the air, water or other natural resources of the state.” Subsection (b) of this statute further provides that no conduct shall be authorized or approved that does have such an effect if there exists, considering all relevant surrounding circumstances and factors, “a feasible and prudent

alternative consistent with the reasonable requirements of the public health, safety and welfare.” The proposed *Connecticut Solid Waste Management Plan* also provides that the DEP will continue to consider alternative options for the handling of ash.

The Intervenors SOS and HEJN, as well as sworn speakers, discussed the options available to CRRA as alternatives to the disposal of ash in the Phase I facility. These options included use of the Putnam Landfill, shipment of the waste out-of-state, and pursuit of recycling as a management option to reduce the amount of ash coming to the facility. The parties were also directed to include alternative options in their post-hearing submissions.

The burden of proving that the activities that are the subject of these applications would have, or would be reasonably likely to have, the effect of “unreasonably polluting, impairing or destroying” belongs to the Intervenors. *Manchester Environmental Coalition v. Stockton*, 184 Conn. 51 (1981). The Intervenors have not presented sufficient evidence to support such a conclusion. There is no evidence that the proposed modifications are inconsistent with statutory and regulatory requirements, or with any policies designed to protect the natural resources of the State.

Section 22a-19 requires the consideration of alternatives only when it is first determined that the proposed activities will cause unreasonable pollution. *Paige v. Town Planning & Zoning Commission of the Town of Fairfield*, 235 Conn. 448 (1995). However, because the parties were asked to present alternatives and the proposed *Solid Waste Management Plan* does discuss the consideration of alternatives in planning for solid waste management, the alternatives presented in this case will be assessed.

The alternative of sending the ash to Putnam or out-of-state merely shifts the burden of ash residue disposal to another town or state. It is not an answer to say “not-in-my-backyard” when there is no proof that an alternative offers any benefit except removing the waste from one’s backyard. The applicant presented extensive evidence of its efforts to explore recycling as an option for ash residue management. This evidence included interactions with the DEP regarding the possibility that a permit could be obtained for such an operation, and an exploration of the uses for such recycled ash following treatment at a facility. The evidence presented demonstrates that ash recycling is not yet a “feasible and prudent alternative consistent with the reasonable requirements of the public health, safety and welfare” so that it should be considered in any evaluation of the permit modifications that are the subject of this proceeding.

G

ENVIRONMENTAL EQUITY

The concept of environmental equity means that all people should be treated fairly under environmental laws regardless of race, ethnicity, culture or economic status. As evidence of its commitment to this principle, the DEP issued a statement on environmental equity in on December 17, 1993. This *Environmental Equity Policy* provided in pertinent part that “...no segment of the population should, because of its racial or economic makeup, bear a disproportionate share of the risks and consequences of environmental pollution or be denied equal access to environmental benefits.” The DEP created the Environmental Equity Program in the agency to incorporate these principles into aspects of its program development, policy-making and regulatory

activities. Environmental Equity Program staff was involved with these issues in this application and, as the evidence demonstrated, suggested tasks that the applicant successfully completed in meeting its obligations under the *Environmental Equity Policy* as implemented by the DEP.

The DEP *Environmental Equity Policy* is, as it is titled, a policy. A policy statement is distinguished from a substantive rule of an agency, which is reflected in a law or regulation of that agency. “[A] policy statement ‘is neither a rule nor a precedent but is merely an announcement to the public of the policy which the agency hopes to implement in future rule-makings or adjudications.’” *Panhandle Eastern Pipe Line Company v. Federal Energy Regulatory Commission*, 198 F. 3d 266, 269 (D.C. Cir. 1999), citing *Pacific Gas & Electric Power Commission*, 506 F. 2d 33, 38 (D.C. Cir. 1974). “In other words, a policy statement has neither the force of a substantive rule adopted pursuant to rulemaking nor the binding effect of an order following an adjudication.” *Id.* The DEP *Environmental Equity Policy* serves as a guide to assist the Department in its decision-making process and, as the evidence indicates, was used to do so in this matter.

The record clearly demonstrates that Staff understood the implications of the DEP *Environmental Equity Policy* and took the necessary actions to insure that it would be implemented in this case. Staff inquired of the Environmental Equity Program staff as to the tasks that the applicant needed to accomplish under the guiding principles of this *Policy*, which staff and the applicant received.

The Intervenors SOS and the HEJN introduced extensive evidence to support their claims that the Hartford Landfill is the cause of health problems and other

detrimental environmental consequences. They are opposed to the expansion of the Phase I facility as they believe this expansion will only exacerbate the existing risk, while resulting in a higher “mountain” of waste. The Intervenors believe that the consequences of the Landfill are unfairly and unjustly borne by them as members of minority populations, and that they suffer as a result of this disproportionate burden of risk. The Intervenors further allege that they are denied equal access to any environmental benefits.

The applicant presented evidence to rebut these theories, submitting testimony and other evidence that the ash residue, the subject of this proceeding, has not been proven to be the cause of such harm. The DEP presented testimony that accurately explained that the current environmental laws and regulations are, by their very nature, protective of the public’s health, safety and general welfare. This result is ensured by the implementation of the DEP permit review process. In addition, Staff correctly noted that the present applications modify two permits whose impact was already assessed by the Commissioner when issuing his initial decision to grant permits to construct and operate the Phase I and II ash residue facilities.

Even assuming, *arguendo*, that the DEP *Environmental Equity Policy* requires a determination as to the potential harm of a proposed activity on the health of impacted residents, the Intervenors did not present sufficient evidence to establish that the Landfill – and any expansion of the Phase I facility – is the cause of their health problems. While sympathetic to the health complaints and circumstances of the nearby residents, I cannot accept anecdotal evidence of health effects as proof of a sufficient connection between the Landfill and consequences to health. As was evident at the hearing, there are many

opinions and unknowns factors in the study of potential toxins and their impact on human health.

Although the Intervenor SOS and the HEJN did not make an explicit claim of unconstitutional discrimination, the DEP *Environmental Equity Policy* withstands such a claim. In 1996, when deciding on the applications to authorize the Phase I and II ash residue facilities, the Commissioner was faced with a claim that permits to be issued to the applicant would allow pollution to have a disparate impact on the members of the then-Intervenor One/Chane. According to One/Chane, this would result in the low income and minority residents it represented to be subject to an unconstitutionally disproportionate level of pollution.

Citing U.S. Supreme Court precedent, the Commissioner clarified that proof of racially discriminatory intent or purpose was required to show a violation of the equal protection clause. At a minimum, he opined, this requires some showing that a racially discriminatory intent or purpose was a motivating factor in the Department's decision. Assertions that the proposed expansion of the Phase I facility will have a disproportionate impact on the minority populations in the City of Hartford do not rise to proof of any racial bias as a motivating factor in the decision of the DEP to tentatively approve these current applications.

The DEP is charged with the responsibility and mission to protect the environment and safeguard human health, safety and the general welfare. It is sensitive to concerns about health and environmental risk. The statutory and regulatory standards set out in the environmental laws of this State guide this agency in meeting its responsibility

to protect the health, safety and welfare the State's citizens while conserving, protecting, and preserving the State's natural resources.

IV

CONCLUSION

The proposed modifications to the solid waste and groundwater discharge permits are consistent with and satisfy all applicable provisions of all relevant statutes and regulations. General Statutes §§22a-207 *et. seq.*, 22a-430; Regs., Conn. State Agencies §§22a-209-1 *et. seq.*, 22a-430-1 *et. seq.* No new or revised determination of need is necessary as the proposed modifications will not increase the capacity authorized for ash residue disposal at the Hartford Landfill. §22a-208d. The applicant's compliance history does not indicate a pattern or practice of willful noncompliance to justify denial of the permit modifications. The activities proposed in these permit modifications do not require an air permit, and to the extent alternatives to the proposed actions needed to be considered, there are no feasible or prudent alternatives to the expansion of the Phase I ash residue facility. Finally, the applicant successfully met its obligations under the *Environmental Equity Policy* as implemented by the DEP.

I recommend that the proposed modifications to solid waste Permit No. 064-4(L) and groundwater discharge Permit No. LF0000014 be issued, with the modifications to Permit No. 064-4(L) outlined below.

RECOMMENDED PERMIT CONDITIONS

Permit No. 064-4(L)

The following language is to be added to the noted sections of the Permit.

REPORTING

In the first sentence of Paragraph 10, the phrase “who is independent of the Permittee and”, shall be inserted between the phrases “professional engineer” and “registered in the State of Connecticut”.

ADDITONAL REQUIREMENTS

26. The Applicant shall make the necessary design, operational and maintenance improvements to the on-site wheel wash system to allow its operation and maintenance throughout the year. The Applicant shall make these improvements so that the wheel wash facility is fully operational by November 1, 2001.

27. The Applicant shall take all measures possible to ensure that trucks and any other vehicles transporting combustion ash residue waste to the Landfill facility access the Landfill via Interstate-91 and Jennings and Liebert Roads. The Applicant shall post a notice at the Scale House on-site at its facility advising trucks making such deliveries that travel on residential streets adjacent to the Landfill is prohibited, except in emergencies or other unavoidable circumstances.

This *Proposed Final Decision* is issued on this 23rd day of March, 2001.

/s/ Janice B. Deshais
Janice B. Deshais, Hearing Officer