

WHEN RECORDED, RETURN TO:

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GARY W. OTT
RECORDER, SALT LAKE COUNTY, UTAH
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1700 S 4650 W
SLC UT 84104
BY: EHB, DEPUTY - WI 37 p.

**NOTICE OF SITE MANAGEMENT PLAN
FOR THE WESTERN ALUM PONDS**

This NOTICE OF SITE MANAGEMENT PLAN FOR THE WESTERN ALUM PONDS is executed by Ninigret Technology Park, L.C., the Owner under that certain Site Management Plan for the Western Alum Ponds (the "Site Management Plan") submitted to and approved by the Utah Department of Environmental Quality, Utah Division of Solid and Hazardous Waste, a certified copy of which is attached hereto as Exhibit "A" and incorporated herein by this reference, and is made with respect to the certain real property located in Salt Lake County, Utah (the "Property"), which is more particularly described in Exhibit "B" attached hereto and incorporated herein by this reference.

NOTICE is hereby given of the approval of the Site Management Plan with respect to the Property described in Exhibit "B."

DATED this 19th day of July 2004.

OWNER

NINIGRET TECHNOLOGY PARK, L.C.
by its sole manager:

THE NINIGRET GROUP, L.C.,
A Utah limited liability company

By Randolph G. Abood
Randolph G. Abood
Managing Member

EXHIBIT A
SITE MANAGEMENT PLAN



Millennium Science & Engineering, Inc.

2319 South Foothill Drive, Suite 180
Salt Lake City, Utah 84109
Phone: 801.461.0888
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saltlakecity@mse-environmental.com

June 2, 2004

James P. Lansbarkis
Environmental Health Scientist
Utah Department of Environmental Quality
Division of Solid & Hazardous Waste
P.O. Box 144880
Salt Lake City, UT 84114-4880

RE: Site Management Plan for the Western Alum Ponds (western portion of SWMU #20), former Engelhard Facility, Salt Lake City, Utah

Dear Mr. Lansbarkis:

Enclosed please find two (2) copies of the Site Management Plan (SMP) for the western alum ponds. This SMP has been revised to incorporate recent additional comments and clarifications between Ninigret and DSHW. The SMP describes site management actions for the western alum ponds, based on the results of the approved human health and ecological risk assessments. The SMP includes two attachments consisting of proposed deed notices to enforce the site management requirements under this SMP.

We appreciate your prompt review of the SMP. If you should need additional information, please contact Gary McEntee at (914) 438-0649 or me at (801) 461-0888.

Sincerely,

MILLENNIUM SCIENCE & ENGINEERING

Andy King
Environmental Geologist/
MSE Project Manager

cc: Gary McEntee, Ninigret Technology Park, L.C.
Hal Pos, Parsons, Behle & Latimer



Millennium Science & Engineering, Inc.

**SITE MANAGEMENT PLAN
FOR THE WESTERN ALUM PONDS
(WESTERN PORTION OF SWMU #20)**

**Engelhard Facility
2550 West Andrew Avenue
Salt Lake City, Utah**

June 2, 2004

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ATTACHMENT 1 NOTICE OF SITE MANAGEMENT PLAN FOR THE
WESTERN ALUM PONDS

ATTACHMENT 2 NOTICE OF OBLIGATIONS

1.0 INTRODUCTION

1.1 Scope

This Site Management Plan (SMP) describes site management actions for the western portion of Solid Waste Management Unit (SWMU) #20, known as the Western Alum Ponds, at the former Engelhard facility (the Facility). The Facility is now owned by Ninigret Technology Park.

This SMP is based on the results of a baseline human risk assessment (MSE, 2001c) and an ecological risk assessment (MSE, 2003c) submitted to the Utah Department of Environmental Quality, Division of Solid & Hazardous Waste (DSHW) in accordance with the requirements at Utah Administrative Code (UAC) R315-101. The requirements at R315-101 establish standards to support risk-based cleanup and closure standards at sites for which remediation or removal of constituents to background levels will not be achieved. Preliminary human health risk estimates had indicated that the level of risk may exceed 1×10^{-6} for carcinogens or a Hazard Index of one for non-carcinogens based on a residential exposure scenario. However, the actual and future land use conditions do not include residential land use, and offer a more protective exposure scenario than residential land use. Therefore, the human health risk assessment was conducted in accordance with Utah Administrative Code (UAC) R315-101-5.2 (b)(2) for actual and future land use conditions, based on site-specific physical and chemical information and the assumption that the affected media will not have undergone any remediation or controls to reduce exposure.

The site is in an area zoned for commercial/industrial (light manufacturing) land use, and the actual land use for the planned redevelopment is commercial/light industrial. The planned redevelopment will provide a more protective exposure scenario than the present land use. The planned redevelopment eliminates all exposure pathways to future onsite commercial workers due to placement of buildings, paved parking areas, and landscaped areas that will prevent contact with constituents beneath the site. Furthermore, the site is not, and will not be, used in a residential land use scenario.

Because constituents at this site will not be remediated or removed to background levels, R-315-101-6 requires a Site Management Plan and provides three options for the SMP. These SMP options are summarized as follows:

- 1) The SMP may contain a no further action option only if the level of human health risk present at the site is below 1×10^{-6} for carcinogens and a Hazard Index of "less than one" for non-carcinogens based on a residential exposure scenario.
- 2) The SMP must contain appropriate management activities e.g., monitoring, deed notations, site security, or post-closure care, if the level of human health risk present at the site is less than 1×10^{-4} for a risk assessment based on actual land use conditions, but greater than 1×10^{-6} for a risk assessment based on a residential exposure scenario, and the Hazard Index is "less than one" using both exposure scenarios. The SMP may, but is not required to, include corrective action.

- 3) The SMP must contain procedures for corrective action if the level of human health risk present at the site is greater than 1×10^{-4} for carcinogens, or a Hazard Index of "greater than one" for non-carcinogens, for a risk assessment based on the actual land use.

As discussed in Section 2 of this SMP, the level of human health risk is less than 1×10^{-4} for carcinogens and a Hazard Index of less than one for non-carcinogens based on actual land use conditions, and assuming that no remediation or controls are implemented to mitigate potential exposure to constituents at the site. Therefore, a Site Management Plan is required for this site, and the SMP must include appropriate management actions, but the SMP is not required to include corrective action.

Although not required by R315-101 rules, corrective action has been conducted on approximately 103 acres of the 107-acre parcel, as further described in Section 1.3 of this SMP. Corrective action was conducted in accordance with an approved Corrective Action Plan and CAP Addendum in order to stabilize the affected media by eliminating low-pH liquids, raising the pH of affected soils, and compacting the treated material, all of which result in further reducing the potential for leaching of constituents to groundwater. Future redevelopment of the site will even further reduce the potential for exposure to constituents at the site.

1.2 Site Background

The Facility is located at 2550 Andrew Avenue in western Salt Lake City. The alum ponds (SWMU #20) are located approximately one-half mile west of the Facility in the northern half of Sections 17 and 18, Township 1 South, Range 1 West, Salt Lake Base and Meridian. The Western Alum Ponds are located in Section 18, immediately west of Bangerter Highway and south of California Avenue.

Filtrol Corporation purchased land occupied by the Facility and the alum ponds in 1950, and the Facility was developed as an activated clay catalyst production plant. The material in the western alum ponds is a by-product of the former activated clay catalyst production process, which was conducted at the Facility by Filtrol Corporation from 1951 to approximately 1981. The primary raw materials included natural aluminosilicate clays and sulfuric acid. The process involved drying and crushing the natural clays before treating them with sulfuric acid, thereby removing undesirable materials that were separated from the stripped clays via a series of thickener vessels. The stripped clays were then filtered, dried, ground, pelletized, and thermally treated to produce activated clay catalysts. The by-products including alum (aluminum sulfate), silicates, and low-pH water were discharged to the alum ponds. The by-products were initially discharged to the NE pond in the northeastern portion of SWMU #20 (east of the present-day Bangerter Highway), and were later discharged also to the L pond and the western ponds as these ponds were subsequently constructed. By 1981, Filtrol Corporation had ceased the activated clay catalyst production process and was converting operations to the production of fresh alumina catalyst and regeneration of spent alumina catalyst. The fresh alumina catalyst production process did not generate

wastes that were discharged to the alum ponds. However, scrubber blowdown water and non-contact cooling water from the regeneration process were discharged to the eastern alum ponds between 1981 and 1989, but no materials were discharged to the western alum ponds after early 1981 from this or any other operation. Engelhard Corporation acquired the Facility in 1988, and ceased operations at the site in 2000. Ninigret Technology Park acquired the property in portions during 2000 and 2002.

Until the initiation of corrective action in March 2001, the western alum ponds of SWMU #20 were mostly covered by acidic alum solids, including native soils which had previously been in contact with and affected by acidic alum solutions. The western alum ponds also contained residual alum liquids within and adjacent to the margins of some of the ponds. The alum liquids were subject to evaporation, and the area covered by liquids varied with seasonal weather conditions. The alum liquids typically became more highly acidic and concentrated with dissolved constituents due to evaporation during extended hot and dry conditions.

1.3 Corrective Action

A Corrective Action Plan (CAP) was developed for the western alum ponds and approved by the Utah Division of Solid & Hazardous Waste (DSHW) in March 2001 (MSE, 2001a). The CAP was designed to eliminate the ponded acidic liquids, neutralize the residual alum sludges and solids to prevent additional alum liquor from forming, and reduce the potential for metals to leach to groundwater, resulting in a stabilized end product to allow redevelopment of the parcel.

1.3.1 Corrective Action Completed

The corrective action procedures were initiated at the site in March 2001. Between March and September 2001 neutralization and stabilization of approximately 85 acres of the site was accomplished in accordance with the performance criteria set forth in the CAP. In August 2001, the site contractor encountered deposits of alum much deeper than originally anticipated. These deep deposits also contained large quantities of liquid which impacted the site contractor's ability to excavate the alum deposits. These conditions necessitated a modification of the work procedures and approaches for the remainder of the site.

During the following winter months (2001-2002), Ninigret and UDEQ personnel met on several occasions to review the performance data from the work performed on the initial 85 acres of the site and discuss alternative approaches for the site work remaining within the deep deposit areas. A CAP addendum was developed in conjunction with UDEQ that detailed specific work practices within the deep deposit areas and modified the performance testing practices for this area. Work under the CAP addendum began in August of 2002 and was completed in January 2003. The corrective action conducted from March 2001 through January 2003 included approximately 103 acres of the 107-acre parcel, and was documented in a previous report (MSE, 2003a).

1.3.2 Corrective Action Pending Completion

Ninigret is seeking a no further action letter on soils from the UDEQ on that portion of the site that is outside the blue zone on the map contained in this SMP. This completed area has been remediated by Ninigret and the resulting data reviewed by UDEQ. UDEQ agrees that the conditions of the corrective action plan and its addendum have been substantially met for this portion of the site to the extent that no further work is required. It is anticipated that all future site work will, therefore, be limited to the blue zone depicted on the map. Since the extent of contamination in the blue zone has not been fully determined to date, the complete details of this future work have not been decided and cannot be detailed in this plan. Ninigret will work to obtain the information needed to make the determination of efforts remaining for the blue zone. It will then implement remediation of the areas in the blue zone according to the outcome of its investigations and on a schedule approved by UDEQ. All future investigative and remedial efforts in the blue zone will be in accordance with applicable portions of the CAP addendum and all changes will be brought to the attention of UDEQ for review and approval. However, there may be some situations encountered that are not anticipated in the CAP addendum since this area had deep deposits of sand and alum, experienced overtopping and upwelling of waste water at and near the dike during its operational history and because it borders the Lee Drain. Ninigret will propose its actions and obtain approval from UDEQ for all its efforts in the blue zone.

2.0 SITE RISK

2.1 Human Health Risk

A baseline human health risk assessment was conducted for the western alum ponds of Solid Waste Management Unit # 20 located west of Bangerter Highway (MSE, 2001c). This risk assessment was completed in accordance with Utah Administrative Code (UAC) R315-101 "Cleanup Action and Risk-Based Closure Standards", and is consistent with relevant U.S. Environmental Protection Agency (EPA) guidance. The risk assessment and data collection were conducted according to a DSHW-approved Sampling and Analysis Plan and Quality Assurance Plan (SAP/QAP) dated March 9, 2001 (MSE, 2001b), and revised June 21, 2001. Chemicals detected in soils and groundwater at the western alum ponds were evaluated using the procedures outlined in the State of Utah Cleanup Action and Risk-Based Closure Standard (R315-101-5) and relevant EPA guidance. The soil and groundwater analytical results used in the risk assessment represent baseline conditions independent of the future site redevelopment and the corrective actions which have since been initiated. All chemicals detected in the western alum pond liquids, residues, native soils, and groundwater were evaluated in the risk assessment. If the chemical concentration of a solid sample exceeded its corresponding background concentration, it was retained for evaluation in the risk assessment. All chemicals detected in groundwater were retained for evaluation in the risk assessment.

The risk assessment and its SAP/QAP were designed to evaluate the human health risk due to exposure to volatile organic compounds and metals in soils and

groundwater. However, volatile organic compounds were not detected in soil or groundwater and are, therefore, not potential chemicals of concern. Potential chemicals of concern in the western alum ponds include: aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, thallium, vanadium, and zinc.

A Site Conceptual Exposure Model was developed for the site to identify potential receptors and potential exposure pathways. Potential receptors include future construction workers, and future site workers in a commercial/light industrial land use scenario. Commercial land use exposure factors were used in the risk assessment to determine if excess human health risk was present prior to corrective action. The exposure routes evaluated in the risk assessment are consistent with commercial land use and State of Utah Cleanup Action and Risk-Based Closure Standards. The potential exposure pathways evaluated in the risk assessment for a future construction worker include: incidental ingestion, dermal contact, and inhalation of particulates from alum affected surface and subsurface soils; and incidental ingestion and dermal contact of groundwater. The potential exposure pathways evaluated in the risk assessment for a future commercial site worker include: incidental ingestion, dermal contact, and inhalation of particulates from alum affected surface soils. These potentially complete exposure pathways were conservatively evaluated for the future commercial worker, assuming no controls (e.g., buildings, pavement, landscaping, etc.) are present. However, the planned redevelopment will render these pathways incomplete for the future commercial worker.

The human health risks associated with carcinogenic and non-carcinogenic chemicals of potential concern were estimated in the risk assessment. For carcinogens, risks are estimated as the probability of an individual developing cancer over their lifetime as a result of exposure to a carcinogen. Carcinogenic human health risk is expressed as a probability; for example 1×10^{-6} , means one-in-one million chance that an individual will develop an adverse effect. Non-carcinogenic risk is expressed as a hazard index. The hazard index is a ratio that, if greater than 1, may represent potential for non-carcinogenic health effects. EPA standardized risk assessment reporting tools (Standard Tables) were used to document the risk assessment. The Standard Tables document the majority of the data and assumptions used to evaluate risk, as well as the risks and hazards calculated (MSE, 2001c).

Quantitative results of the risk assessment indicate that the human health risks due to exposure to potential chemicals of concern are significantly below the action levels set forth in Utah's Cleanup Action and Risk-Based Closure Standards. The human health risks associated with exposure to carcinogenic chemicals at the site are significantly below the regulatory action level of 1×10^{-4} and the non-carcinogenic hazard index action level of 1 for an industrial exposure scenario. More specifically, the carcinogenic health risk for a future construction worker is 2.6×10^{-6} and the hazard index for non-carcinogenic chemicals is 0.9. The carcinogenic health risk for a future commercial site

worker is 9.9×10^{-6} and the hazard index is 0.2, assuming that the exposure pathways are complete (i.e., no controls provided by buildings, pavement, landscaped areas, etc.).

The risk assessment assumed baseline conditions without any corrective action, engineering controls, or development to reduce or control exposure to site constituents. Therefore, the de minimis risk to human health estimated by the risk assessment is further reduced by the corrective action and will be even further reduced by subsequent development of the property.

2.2 Ecological Risk

In addition to a human health risk assessment, Utah's risk-based closure rules require an ecological risk assessment unless a waiver is granted by the Executive Secretary of the Utah Division of Solid & Hazardous Waste (DSHW). Ninigret previously requested a waiver based on the lack of ecological receptors and habitat at the site under current and future land use conditions. DSHW informed Ninigret that the future land use conditions (development for commercial/light industrial use) are considered similar to administrative controls, and as such an ecological risk assessment would need to be prepared to evaluate potential ecological effects that could occur if the site were to remain undeveloped. Accordingly, Ninigret developed an ecological risk assessment (ERA) that assumes that the site remains undeveloped (MSE, 2003b).

Using site-specific chemical data and an inventory of the biological community at the site and surrounding area, the ecological risk was quantified for a subset of measurement receptors likely to be exposed to the site in the shrub-scrub and aquatic food webs, assuming that the site remains undeveloped. For the purposes of the ecological assessment, in the shrub-scrub food web it is assumed that rodents colonize the site and serve as prey for carnivorous birds and mammals including the red-tailed hawk and the red fox. In the aquatic food web, it is assumed that mallard ducks are exposed to water, sediment, and plants in the nearby Lee Drain ditch. In addition, the ecological risk was quantified for the red fox in the aquatic food web by ingestion of water from the Lee Drain Ditch. Using highly conservative default values and assumptions, ecological screening quotients (ESQs) were calculated for each of the selected measurement receptors, and phytotoxicity to plants was evaluated using available soil phytotoxicity benchmarks.

Based on the results of the ERA, if the site remained undeveloped, the potential for adverse effects to ecological resources from site constituents would be minimal. Therefore, it would not be appropriate to consider controls to reduce potential impact to ecological resources from site constituents. However, the actual future land use includes redeveloping the entire site, which will effectively eliminate the establishment of habitat and the potential for exposure of ecological receptors to site constituents.

3.0 NATURE AND EXTENT OF REMAINING CONTAMINANTS

Metals concentrations exceeding site-specific background concentrations remain in the near-surface and subsurface soils on the site and in groundwater beneath the site. However, the level of risk to future non-residential users of the property is well below the limits established at UAC R315-101 for current and future land use at the property, assuming no controls to minimize exposure. Additionally, the potential for adverse effects to ecological resources from site constituents is minimal, assuming the site remains undeveloped. Redevelopment of the site, including the construction of buildings, paved parking areas, and paved roadways, will provide controls to eliminate exposure pathways and further reduce the potential for exposure to human and ecological receptors.

4.0 SITE MANAGEMENT REQUIREMENTS

The actual and future land use for the site is commercial/light industrial, and does not include use for residential purposes. Based on the level of risk at the site with respect to actual and future land use, R-315-101-6 requires that the SMP contain appropriate management actions to minimize the potential for exposure to constituents. This will be accomplished through the site management actions outlined below.

4.1 Land Use Restrictions

The site is in an area already zoned for commercial/industrial (light manufacturing) land use. As such, the current zoning precludes development for residential land use. Additional land use restrictions will be imposed to prevent residential development (including child care facilities and early education schools) and ensure that the property is used solely for commercial and industrial purposes in the future. Similarly, no edible crops will be grown on site without the approval of UDEQ. These restrictions will be imposed and enforced on the current property owner through deed notices and on subsequent property owners through deed restrictions.

4.2 Groundwater Use Restrictions

Restrictions will also be imposed to prevent use of groundwater from beneath the property. A separate groundwater monitoring program will be established to monitor concentrations of chemicals in groundwater over time. The restriction on groundwater use may be modified or eased if the UDEQ determines it is appropriate, based on analytical results.

This paragraph applies to groundwater encountered during a normal work activity such as underground or in ground utility placement, in which the groundwater needs to be removed to facilitate that work activity. Groundwater management options are intended to comply with the principles of non-degradation in R315-101-3. In the event that

temporary excavation dewatering is needed to facilitate a work activity, any groundwater to be extracted will be immediately characterized for pH and metals constituents and managed accordingly, unless it is to be returned directly to the aquifer from which it originated as provided below, or is otherwise required, such as for worker health and safety. No groundwater with constituent concentrations above background levels may be placed into an on-site retention pond, placed on uncontaminated soil, or placed on treated soils. Groundwater that does not exhibit hazardous waste characteristics may be placed into any of the non-remediated existing alum ponds, other than the Northwest or Harvest Ponds. Groundwater may be discharged offsite to a storm water system, sanitary sewer system, the Lee Drain, and the Brighton Canal with prior approval from Utah Division of Water Quality. Groundwater that contains a hazardous waste characteristic must be managed according to applicable rules, except that in all cases, groundwater that is encountered may be returned directly to the aquifer from which it originated within the area adjacent to the ongoing work so long as the return of that groundwater does not meet the criteria of an injection well as defined at Utah Admin. Code R317-7-2.53. Groundwater that does not exceed background concentrations of constituents does not have a restriction on its disposition or usage by the Utah Division of Solid and Hazardous Waste, except that in all cases ground water cannot be used to dilute a hazardous waste.

4.3 Hazard Notification

Controls provided by the site development (buildings, paved areas, landscaping, etc.) will render all potential exposure pathways to future commercial workers incomplete. Therefore, no notification beyond implementation of all other requirements of this SMP is warranted for future commercial workers. If initial commercial workers occupy a portion of the site before the development establishes sitewide exposure controls, potential exposure pathways may temporarily be complete (e.g., for commercial workers outside of buildings). Under these conditions, the risk levels for the commercial worker are significantly below the regulatory standard of 1×10^{-4} (carcinogenic risk) and noncarcinogenic hazard index of 1. However, because the potential for exposure will exist for the initial commercial workers, these workers will be notified of the existing hazard beneath the site and of methods to minimize the risks associated with the hazard.

Future construction workers who excavate into subsurface soils and/or groundwater will be exposed to constituents by the exposure pathways evaluated in the risk assessment. Under these conditions, the risk levels are significantly less than the regulatory standard of 1×10^{-4} (carcinogenic risk) and noncarcinogenic hazard index of 1. Because the exposure pathways will be complete, future construction workers involved in excavation within the site shall be notified of the existing hazards and procedures to minimize the potential for exposure to site constituents. This notification may be provided in the form of a fact sheet, developed by the Owner, to be incorporated into the construction worker's health and safety program. A qualified person shall write the notifications.

4.4 Soil Excavation

Based on the risk levels estimated for future construction workers, exposure to constituents in soils through excavation for construction purposes will not result in risk levels exceeding the standards set forth in UAC R315-101-6(d). Therefore, restrictions on excavation are not necessary beyond hazard notification in accordance with Section 4.3 above. However, since the soils contain inorganic constituents at concentrations exceeding natural background levels, soils excavated from the property must be properly managed to ensure that they are not deposited at any offsite location used for residential purposes. Therefore, all excavated material from the property shall either remain on the property or be disposed at an appropriately licensed treatment, storage, and disposal (TSD) facility. Based on the characteristics of the untreated and treated alum materials, any soil resulting from excavation activities would not be classified as a hazardous waste and would likely be accepted for disposal as solid waste at a properly permitted landfill facility. Removal of soils off of the site to any other location or facility, including a soil recycling facility, will require UDEQ approval.

4.5 Enforcement

The above site management actions are intended to follow title to the land in perpetuity through a deed notice, and shall apply to and bind all subsequent property owners unless subsequent determinations by the Utah Division of Solid & Hazardous Waste or its successors indicate that the remaining level of risk is sufficiently low that the site management requirements may be reduced or eliminated.

The above site management requirements shall be imposed and enforced on Ninigret Technology Park as the current owner pursuant to recorded deed notices and on successors in title through deed restrictions. Following approval of this Site Management Plan, Ninigret Technology Park will file and record a Notice of Site Management Plan for the Western Alum Ponds and Deed Notice, copies of which are attached hereto as Attachments 1 and 2, providing notice of its obligations concerning access and site management requirements on the property. Additionally, effective the date that these documents are recorded in the Salt Lake County Recorder's Office, each deed, title or other instrument of conveyance conveying an interest in the property executed by Ninigret Technology Park or its successors in title to the property shall include a notice stating that the property is subject to this Site Management Plan and shall reference the recorded location of the Site Management plan and the restrictions applicable to the property under the Site Management Plan. The above site management requirements are intended to follow title to land in perpetuity unless subsequent determinations by the Utah Division of Solid and Hazardous Waste or its successors indicate that the remaining level of risk to human health and the environment on the site is sufficiently low that the site management requirements may either be reduced or eliminated in their entirety.

5.0 PROPERTY ACCESS

Commencing on the date of approval of this Site Management Plan and in accordance with Paragraph 59 of the Stipulation and Consent Agreement No 92060130 ("Consent Agreement") between the Utah Solid and Hazardous Waste Control Board ("Board") and Engelhard Corporation, the predecessor-in-title to the property, all activities conducted by Ninigret Technology Park under this Site Management Plan shall be subject to inspection and enforcement by the Board in accordance with procedures in the Utah Solid and Hazardous Waste Act, Section 19-6-101 et seq., Utah Code Annotated (1953 as amended). Ninigret Technology Park shall provide the Utah Department of Environmental Quality, Division of Solid and Hazardous Waste and its representatives and its authorized contractors, with access at all reasonable times to the property for the purpose of monitoring, sampling and observing activities carried out under the Site Management Plan. These individuals shall conduct themselves in a safe and prudent manner in accordance with the health and safety standards of the Utah Department of Environmental Quality, Division of Solid and Hazardous Waste.

6.0 MONITORING REQUIREMENTS

A groundwater monitoring plan will be established to monitor concentrations of metals and pH in the groundwater beneath the site. The plan will specify the number and location of monitoring points, types of analyses, frequency and duration of monitoring. The groundwater monitoring plan will be designed to determine whether elevated constituent concentrations in groundwater persist beneath the site and/or have migrated from the site, but will also be designed to accommodate future land development within the site boundaries. Based on the results of groundwater monitoring, the potential need for groundwater containment or treatment will be evaluated and implemented, if necessary, to protect human health and the environment. The groundwater monitoring plan will initially be developed for the western alum ponds of SWMU #20, but will later be incorporated into a site-wide groundwater monitoring program encompassing the remaining portions of the former Engelhard facility where groundwater monitoring is necessary. The ground water plan for the western alum ponds will be prepared and submitted for UDEQ review within sixty (60) days following the approval of this site management plan.

Monitoring to ensure compliance with land use restrictions, groundwater use restrictions, limited excavation restrictions, and implementation of the groundwater monitoring program shall be the responsibility of the property owner and/or its assigns. These site management actions will be implemented concurrently with the construction and development of the site.

Monitoring reports documenting the state of compliance with these site management requirements are to be prepared annually and submitted to the Utah Division of Solid &

Hazardous Waste(DSHW). Groundwater monitoring reports are to be submitted to the DSHW within one (1) month following the completion of each groundwater sampling event and receipt of all analytical results.

7.0 PROCEDURES IF SITE MANAGEMENT REQUIREMENTS ARE BREACHED

The stated site management requirements will ensure continued protectiveness of human health and the environment based on current and future land use. If and when the Property Owner and /or its assigns (Property Owner) becomes aware of a deviation from the site management plan requirements the Property Owner shall notify DSHW within five (5) calendar days of their becoming aware of the deviation. The Property Owner will prepare a written report within twenty-five (25) days, detailing the nature of the deviation and the Owner's evaluation. The Property Owner and DSHW will collectively re-evaluate whether the existing site management practices compromise the level of protection afforded by the original site management requirements and, if so, the need for alternate site management requirements will be evaluated to provide a comparable level of protection. Any proposed modification to the site management plan requirements will require UDEQ approval.

8.0 REFERENCES

Millennium Science & Engineering, 2003a. *Alum Sludge Stabilization Corrective Action Report, Western Alum Ponds, Former Engelhard Facility, Salt Lake City, Utah* (February 2003)

Millennium Science & Engineering, 2003b. *Ecological Risk Assessment, Former Engelhard Facility, Western Alum Ponds, Salt Lake City, Utah* (April 2003, Revised August 2003)

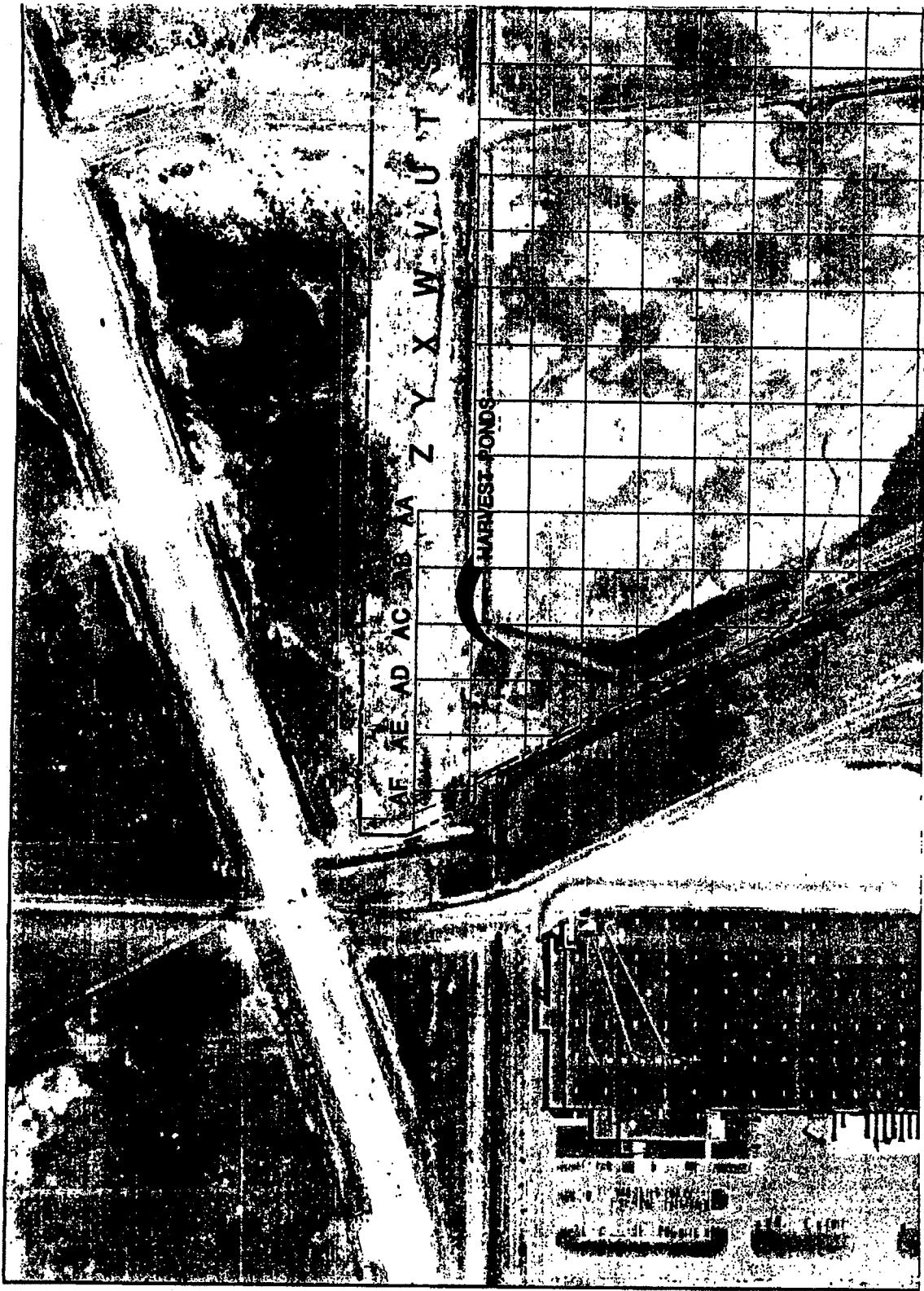
Millennium Science & Engineering, 2002. *Addendum to Corrective Action Plan (including DSHW comments and responses), Engelhard Facility, Salt Lake City, Utah* (September 2002)

Millennium Science & Engineering, 2001a. *Alum Sludge Stabilization Corrective Action Plan, Engelhard Facility, Salt Lake City, Utah* (March 2001)

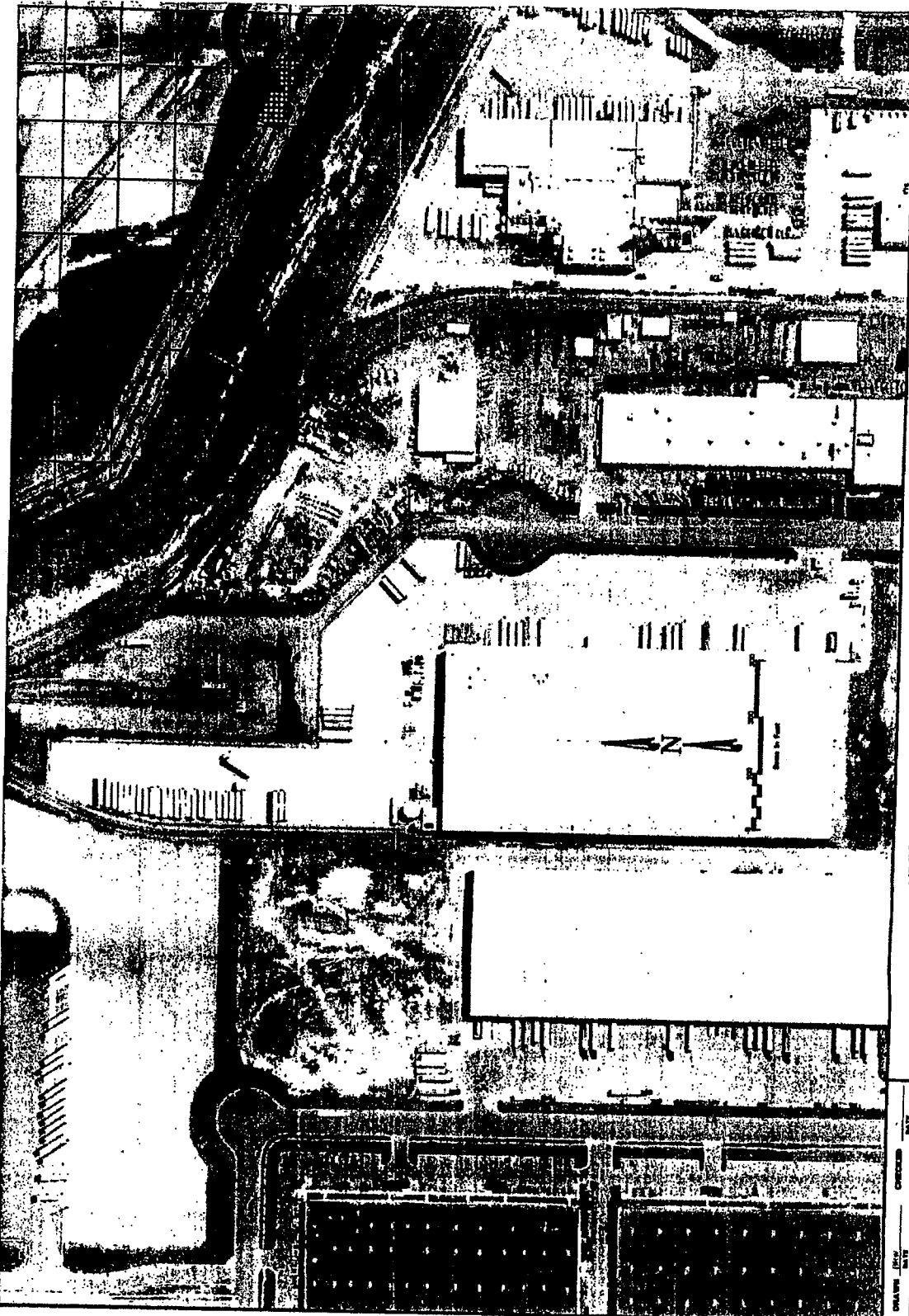
Millennium Science & Engineering, 2001b. *Sampling & Analysis Plan and Quality Assurance Plan for Risk Assessment of the Western Alum Ponds, Engelhard Facility, Salt Lake City, Utah*, (March 9, 2001, Revised June 21, 2001)

Millennium Science & Engineering, 2001c. *Baseline Human Health Risk Assessment for the Western Alum Ponds, Engelhard Facility, 2550 West Andrew Avenue, Salt Lake City, Utah* (October 10, 2001)

U.S. Army Corps of Engineers, 2001. *Site Management Plan, SWMU 4 – Sandblast Areas, Tooele Army Depot, Tooele, Utah* (February 2001)



- POOR COPY -
CO RECORDER



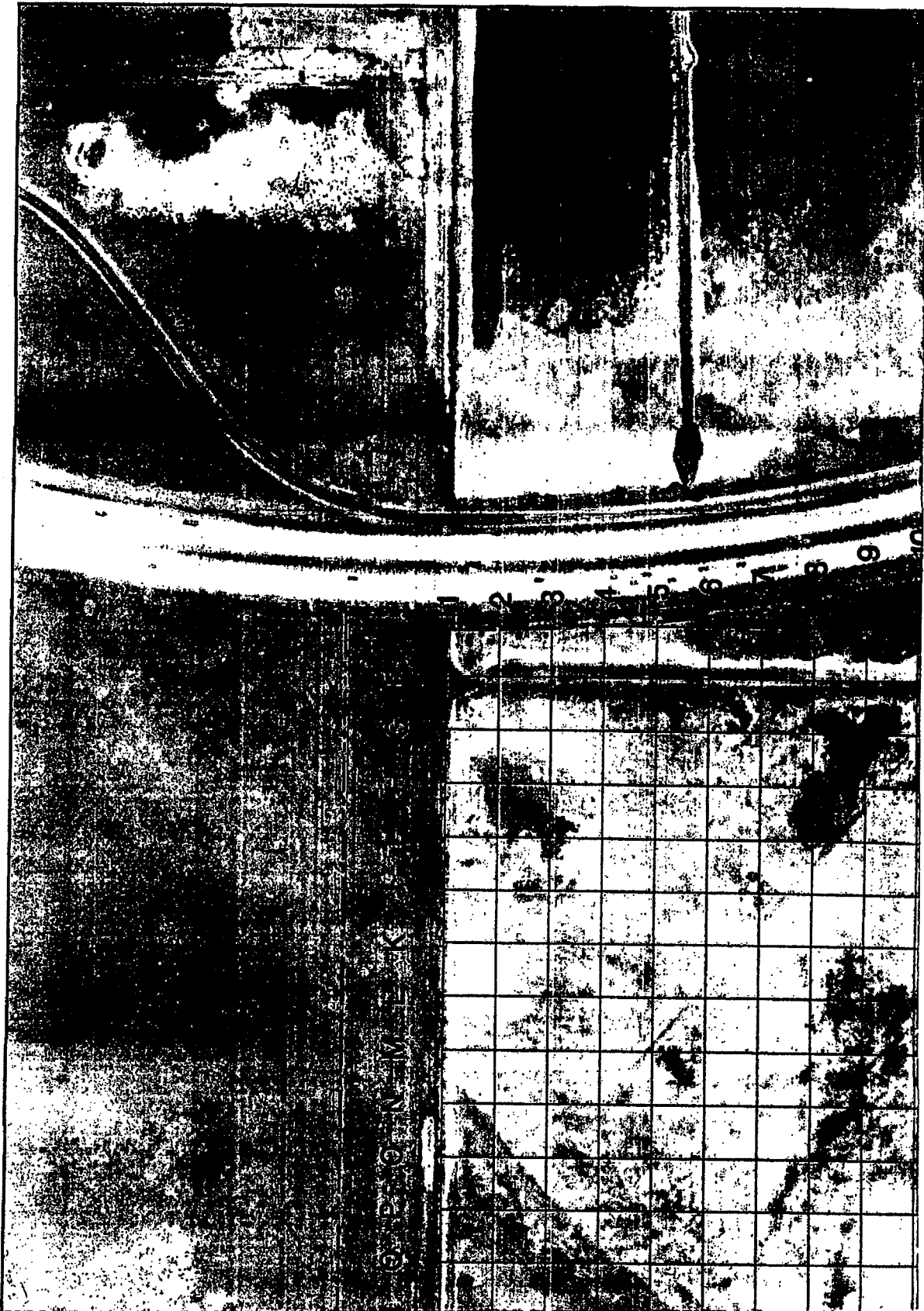
NINGRET CONSTRUCTION COMPANY LG

SALT LAKE CITY, UTAH

DESIGNED	DATE	CHECKED	DATE
DRAWN	DATE	IN CHARGE	DATE
APPROVED	DATE	C.A.M.	DATE
		PERMIT NUMBER	

10/20/04 10:20 AM 10/20/04 10:20 AM 10/20/04 10:20 AM

- POOR COPY -
- CO RECORDER -



POOR COPY -
CO RECORDER



PROJECT NO. 625	
SHEET NO. 1	
DATE	SCALE
BY	DATE
REVISIONS	
NO.	
NINGRET ENVIRONMENTAL REMEDIATION	
REMAINING CORRECTIVE ACTION	

minion
 Associates, L.C.
 10000 E. Grand St. #200
 Denver, CO 80231
 303-733-2000

- P008 COPY -
CO RECORDER

WHEN RECORDED, RETURN TO:

Randolph G. Abood
Ninigret Technology Park, L.C.
4750 West 2100 South, Suite 150
Salt Lake City, Utah 84104

**NOTICE OF SITE MANAGEMENT PLAN
FOR THE WESTERN ALUM PONDS**

This NOTICE OF SITE MANAGEMENT PLAN FOR THE WESTERN ALUM PONDS is executed by Ninigret Technology Park, L.C., the Owner under that certain Site Management Plan for the Western Alum Ponds (the "Site Management Plan") submitted to and approved by the Utah Department of Environmental Quality, Utah Division of Solid and Hazardous Waste, a certified copy of which is attached hereto as Exhibit "A" and incorporated herein by this reference, and is made with respect to the certain real property located in Salt Lake County, Utah (the "Property"), which is more particularly described in Exhibit "B" attached hereto and incorporated herein by this reference.

NOTICE is hereby given of the approval of the Site Management Plan with respect to the Property described in Exhibit "B."

DATED this ____ day of _____ 2004.

OWNER

NINIGRET TECHNOLOGY PARK, L.C.
by its sole manager:

THE NINIGRET GROUP, L.C.,
A Utah limited liability company

By _____
Randolph G. Abood
Managing Member

STATE OF UTAH)
 :
COUNTY OF SALT LAKE) ss.

The foregoing instrument was acknowledged before me this ____ day of _____, 2003, by Randolph G. Abood, the Managing Member of The Ninigret Group, L.C., the sole manager of Ninigret Technology Park, L.C.

My Commission Expires:

NOTARY PUBLIC

Residing at: _____

EXHIBIT A
SITE MANAGEMENT PLAN

EXHIBIT B

WEST PARCEL PROPERTY DESCRIPTION

A part of the South half of Section 7, Township 1 South, Range 1 West, Salt Lake Base and Meridian and the North half of Section 18, Township 1 South, Range 1 West, Salt Lake Base and Meridian, more particularly described as follows:

Beginning on the North line of that certain parcel described as "Parcel 4" in Book 7166 at Page 0076 in the Salt Lake County Recorder's Office, which point is 143.20 feet North $00^{\circ}12'49''$ West along the section line and 0.03 foot South $89^{\circ}58'00''$ East from the Salt Lake County Survey Monument found marking the South quarter corner of Section 7, Township 1 South, Range 1 West, Salt Lake Base and Meridian, and running thence along said North line South $89^{\circ}57'57''$ East 1608.51 feet to the Northeast corner of said Parcel 4 and a point on the westerly right-of-way line of Bangerter Highway, as shown on the Utah Department of Highways Right-of-Way Plans for Project Number RS-0162(3), on sheets 6, 7 and 8, said point also being on a 3909.72-foot radius curve to the left (radius point bears South $87^{\circ}57'47''$ East); thence along said right-of-way line the following ten (10) courses: (1) southerly 155.52 feet along the arc of said curve through a central angle of $02^{\circ}16'45''$ (chord bears South $00^{\circ}53'50''$ West 155.51 feet) to a tangent line; (2) South $00^{\circ}14'32''$ East 19.20 feet; (3) North $89^{\circ}45'28''$ East 5.00 feet; (4) South $00^{\circ}14'32''$ East 29.22 feet; (5) South $89^{\circ}58'06''$ West 30.00 feet; (6) South $00^{\circ}14'32''$ East 16.21 feet to the point of curvature with a 3934.72-foot radius curve to the left; (7) southeasterly 1063.01 feet along the arc of said curve through a central angle of $15^{\circ}28'50''$ (chord bears South $07^{\circ}58'57''$ East 1059.88 feet) to a tangent line; (8) South $15^{\circ}43'22''$ East 1285.29 feet; (9) North $89^{\circ}57'24''$ East 15.58 feet; (10) South $15^{\circ}43'22''$ East 15.12 feet to a point on that certain right-of-way line for Utah Power and Light, as described in Book 2278 at Page 495, as recorded in the Salt Lake County Recorder's Office; thence along said right-of-way line North $89^{\circ}58'12''$ West 132.35 feet; thence along the northerly line of that certain parcel described as "Parcel 4" in Book 6031 at Page 2703 in the Salt Lake County Recorder's Office North $65^{\circ}35'12''$ West 459.30 feet to the southwesterly line of that certain parcel of land described as "PARCEL" in Book 6031 at Page 2703 in the Salt Lake County Recorder's Office; thence along said southwesterly line the following three (3) courses: (1) North $54^{\circ}58'17''$ West 174.40 feet; (2) North $64^{\circ}30'47''$ West 2146.24 feet; (3) North $26^{\circ}35'17''$ West 1232.38 feet to the southerly line of that certain parcel described as Parcel 2 in Book 7166 at Page 0072 in the Salt Lake County Recorder's Office; thence along said southerly line South $89^{\circ}58'06''$ West 42.61 feet to the westerly line of said Parcel 2; thence along said westerly line and the westerly line of that certain parcel described as "Parcel 1" in Book 7166 at Page 0072 in the Salt Lake County Recorder's Office North $26^{\circ}47'12''$ West 137.51 feet; thence continuing along the westerly line of said Parcel 1 North $00^{\circ}49'48''$ East 84.79 feet to the Northwest corner of said Parcel 1; thence along the North line of said Parcel 1 South $89^{\circ}58'00''$ East 1189.19 feet to the point of beginning. Contains approximately 107.98 acres.

WHEN RECORDED, RETURN TO:

Randolph G. Abood
Ninigret Technology Park, L.C.
4750 West 2100 South, Suite 150
Salt Lake City, Utah 84104

NOTICE OF OBLIGATIONS

This NOTICE OF OBLIGATIONS is executed by Ninigret Technology Park, L.C. ("Ninigret"), the Owner under that certain Site Management Plan for the Western Alum Ponds (the "Site Management Plan") submitted to and approved by the Utah Department of Environmental Quality, Division of Solid and Hazardous Waste ("UDEQ"), and is made with respect to that certain real property located in Salt Lake County, Utah (the "Property"), which is more particularly described in Exhibit "A" attached hereto and incorporated herein by this reference.

NOTICE is hereby given that:

1. A certified copy of the Site Management Plan is attached to a Notice of Site Management Plan for the Western Alum Ponds, dated _____, ___ 2004, which will be recorded in the Salt Lake County Recorder's Office contemporaneously with this Notice of Obligations.

2. Pursuant to Section 4 of the Site Management Plan, and effective the date the Notice of Site Management Plan for the Western Alum Ponds is recorded, each deed, title or other instrument of conveyance conveying an interest in the Property executed by Ninigret, or its successors in title to the Property, shall include a notice stating that the Property is subject to the Site Management Plan and shall reference the recorded location of the Site Management Plan and the restrictions applicable to the Property under the Site Management Plan.

3. The Property is subject to certain obligations concerning the implementation, administration and maintenance of the site management requirements pursuant to Section 4 of the Site Management Plan, which is more particularly described in Exhibit "B" attached hereto and incorporated herein by this reference.

4. The Property is subject to various obligations and duties concerning the providing of access to the Property pursuant to Section 5 of the Site Management Plan, which is more particularly described in Exhibit "B" attached hereto and incorporated herein by this reference.

DATED this _____ day of _____ 2004.

OWNER

NINIGRET TECHNOLOGY PARK, L.C.
by its sole manager:

THE NINIGRET GROUP, L.C.,
A Utah limited liability company

By _____
Randolph G. Abood
Managing Member

STATE OF UTAH)
): ss.
COUNTY OF SALT LAKE)

The foregoing instrument was acknowledged before me this _____ day of _____, 2004, by Randolph G. Abood, the Managing Member of The Ninigret Group, L.C., the sole manager of Ninigret Technology Park, L.C.

My Commission Expires:

NOTARY PUBLIC
Residing at: _____

EXHIBIT A

WEST PARCEL PROPERTY DESCRIPTION

A part of the South half of Section 7, Township 1 South, Range 1 West, Salt Lake Base and Meridian and the North half of Section 18, Township 1 South, Range 1 West, Salt Lake Base and Meridian, more particularly described as follows:

Beginning on the North line of that certain parcel described as "Parcel 4" in Book 7166 at Page 0076 in the Salt Lake County Recorder's Office, which point is 143.20 feet North $00^{\circ}12'49''$ West along the section line and 0.03 foot South $89^{\circ}58'00''$ East from the Salt Lake County Survey Monument found marking the South quarter corner of Section 7, Township 1 South, Range 1 West, Salt Lake Base and Meridian, and running thence along said North line South $89^{\circ}57'57''$ East 1608.51 feet to the Northeast corner of said Parcel 4 and a point on the westerly right-of-way line of Bangerter Highway, as shown on the Utah Department of Highways Right-of-Way Plans for Project Number RS-0162(3), on sheets 6, 7 and 8, said point also being on a 3909.72-foot radius curve to the left (radius point bears South $87^{\circ}57'47''$ East); thence along said right-of-way line the following ten (10) courses: (1) southerly 155.52 feet along the arc of said curve through a central angle of $02^{\circ}16'45''$ (chord bears South $00^{\circ}53'50''$ West 155.51 feet) to a tangent line; (2) South $00^{\circ}14'32''$ East 19.20 feet; (3) North $89^{\circ}45'28''$ East 5.00 feet; (4) South $00^{\circ}14'32''$ East 29.22 feet; (5) South $89^{\circ}58'06''$ West 30.00 feet; (6) South $00^{\circ}14'32''$ East 16.21 feet to the point of curvature with a 3934.72-foot radius curve to the left; (7) southeasterly 1063.01 feet along the arc of said curve through a central angle of $15^{\circ}28'50''$ (chord bears South $07^{\circ}58'57''$ East 1059.88 feet) to a tangent line; (8) South $15^{\circ}43'22''$ East 1285.29 feet; (9) North $89^{\circ}57'24''$ East 15.58 feet; (10) South $15^{\circ}43'22''$ East 15.12 feet to a point on that certain right-of-way line for Utah Power and Light, as described in Book 2278 at Page 495, as recorded in the Salt Lake County Recorder's Office; thence along said right-of-way line North $89^{\circ}58'12''$ West 132.35 feet; thence along the northerly line of that certain parcel described as "Parcel 4" in Book 6031 at Page 2703 in the Salt Lake County Recorder's Office North $65^{\circ}35'12''$ West 459.30 feet to the southwesterly line of that certain parcel of land described as "PARCEL" in Book 6031 at Page 2703 in the Salt Lake County Recorder's Office; thence along said southwesterly line the following three (3) courses: (1) North $54^{\circ}58'17''$ West 174.40 feet; (2) North $64^{\circ}30'47''$ West 2146.24 feet; (3) North $26^{\circ}35'17''$ West 1232.38 feet to the southerly line of that certain parcel described as Parcel 2 in Book 7166 at Page 0072 in the Salt Lake County Recorder's Office; thence along said southerly line South $89^{\circ}58'06''$ West 42.61 feet to the westerly line of said Parcel 2; thence along said westerly line and the westerly line of that certain parcel described as "Parcel 1" in Book 7166 at Page 0072 in the Salt Lake County Recorder's Office North $26^{\circ}47'12''$ West 137.51 feet; thence continuing along the westerly line of said Parcel 1 North $00^{\circ}49'48''$ East 84.79 feet to the Northwest corner of said Parcel 1; thence along the North line of said Parcel 1 South $89^{\circ}58'00''$ East 1189.19 feet to the point of beginning. Contains approximately 107.98 acres.

EXHIBIT B

NOTICE OF OBLIGATIONS CONCERNING ACCESS AND SITE MANAGEMENT REQUIREMENTS

This NOTICE OF OBLIGATIONS CONCERNING ACCESS AND SITE MANAGEMENT REQUIREMENTS is executed by Ninigret Technology Park, L.C. ("Ninigret"), the Owner under that certain Site Management Plan for the Western Alum Ponds (the "Site Management Plan") approved by the Utah Department of Environmental Quality, Division of Solid and Hazardous Waste ("UDEQ"), and is made with respect to that certain real property located in Salt Lake County, Utah (the "Property"), which is more particularly described in Exhibit "A" attached to the Notice of Obligations and incorporated herein by this reference.

NOTICE is hereby given, pursuant to the requirements of Sections 4 and 5 of the Site Management Plan, that the following obligations to provide access and to comply with site management requirements, are imposed on the Property under the Site Management Plan:

ACCESS AND SITE MANAGEMENT REQUIREMENTS

1. Commencing on the date of approval of the above-referenced Site Management Plan and in accordance with Paragraph 59 of the Stipulation and Consent Agreement No. 92060130 (the "Consent Agreement") between the Utah Solid and Hazardous Waste Control Board ("Board") and Engelhard Corporation, the predecessor-in-title to the Property, a copy of which is attached hereto as Attachment "A" and incorporated herein by this reference:

(a) Under the Site Management Plan, all activities conducted by Ninigret shall be subject to inspection and enforcement by the Board in accordance with the procedures in the Utah Solid and Hazardous Waste Act, Section 19-6-101 *et seq.*, Utah Code Annotated (1953) as amended.

(b) Ninigret and each of its successors in title shall provide the UDEQ and its representatives and its authorized contractors with access at all reasonable times to the Property for the purpose of conducting sampling and monitoring and observing activities carried out under the Site Management Plan. These individuals shall conduct themselves in a safe and prudent manner in accordance with the health and safety standards of the UDEQ.

2. Ninigret and its successors shall comply with the following site management requirements applicable to the Property:

(a) Land use restrictions shall be imposed to prevent residential development of the Property or use of the Property for growing edible crops or for child care or early education school purposes and to ensure that the Property is used solely for commercial and industrial purposes in the future.

ATTACHMENT A
STIPULATION AND CONSENT AGREEMENT

EXHIBIT B

WEST PARCEL PROPERTY DESCRIPTION

A part of the South half of Section 7, Township 1 South, Range 1 West, Salt Lake Base and Meridian and the North half of Section 18, Township 1 South, Range 1 West, Salt Lake Base and Meridian, more particularly described as follows:

Beginning on the North line of that certain parcel described as "Parcel 4" in Book 7166 at Page 0076 in the Salt Lake County Recorder's Office, which point is 143.20 feet North 00°12'49" West along the section line and 0.03 foot South 89°58'00" East from the Salt Lake County Survey Monument found marking the South quarter corner of Section 7, Township 1 South, Range 1 West, Salt Lake Base and Meridian, and running thence along said North line South 89°57'57" East 1608.51 feet to the Northeast corner of said Parcel 4 and a point on the westerly right-of-way line of Bangerter Highway, as shown on the Utah Department of Highways Right-of-Way Plans for Project Number RS-0162(3), on sheets 6, 7 and 8, said point also being on a 3909.72-foot radius curve to the left (radius point bears South 87°57'47" East); thence along said right-of-way line the following ten (10) courses: (1) southerly 155.52 feet along the arc of said curve through a central angle of 02°16'45" (chord bears South 00°53'50" West 155.51 feet) to a tangent line; (2) South 00°14'32" East 19.20 feet; (3) North 89°45'28" East 5.00 feet; (4) South 00°14'32" East 29.22 feet; (5) South 89°58'06" West 30.00 feet; (6) South 00°14'32" East 16.21 feet to the point of curvature with a 3934.72-foot radius curve to the left; (7) southeasterly 1063.01 feet along the arc of said curve through a central angle of 15°28'50" (chord bears South 07°58'57" East 1059.88 feet) to a tangent line; (8) South 15°43'22" East 1285.29 feet; (9) North 89°57'24" East 15.58 feet; (10) South 15°43'22" East 15.12 feet to a point on that certain right-of-way line for Utah Power and Light, as described in Book 2278 at Page 495, as recorded in the Salt Lake County Recorder's Office; thence along said right-of-way line North 89°58'12" West 132.35 feet; thence along the northerly line of that certain parcel described as "Parcel 4" in Book 6031 at Page 2703 in the Salt Lake County Recorder's Office North 65°35'12" West 459.30 feet to the southwesterly line of that certain parcel of land described as "PARCEL" in Book 6031 at Page 2703 in the Salt Lake County Recorder's Office; thence along said southwesterly line the following three (3) courses: (1) North 54°58'17" West 174.40 feet; (2) North 64°30'47" West 2146.24 feet; (3) North 26°35'17" West 1232.38 feet to the southerly line of that certain parcel described as Parcel 2 in Book 7166 at Page 0072 in the Salt Lake County Recorder's Office; thence along said southerly line South 89°58'06" West 42.61 feet to the westerly line of said Parcel 2; thence along said westerly line and the westerly line of that certain parcel described as "Parcel 1" in Book 7166 at Page 0072 in the Salt Lake County Recorder's Office North 26°47'12" West 137.51 feet; thence continuing along the westerly line of said Parcel 1 North 00°49'48" East 84.79 feet to the Northwest corner of said Parcel 1; thence along the North line of said Parcel 1 South 89°58'00" East 1189.19 feet to the point of beginning. Contains approximately 107.98 acres.

Parcel No. 15-18-200-014