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Appendix D

# NEWMARK AND MUSCOY OPERABLE UNITS' STATEMENT OF WORK

# I. General Provisions

A. Definitions: Terms used in this Statement of Work, if defined in the Consent Decree, shall have the meaning assigned to them in the Consent Decree. The "Facilities" shall mean the Newmark and Muscoy Operable Units extraction, transmission and granular activated carbon treatment systems installed or adopted as part of the Interim Remedy, and shall include the extraction wells, pipelines and appurtenances for both Operable Units, and the treatment plants described as follows: (1) for the Newmark Operable Unit: the North Plant Treatment Facilities, and the Newmark Plume Front Treatment Facilities (also referred to as the South Plant), including the Waterman and 17<sup>th</sup> Street Treatment Plant, and; (2) for the Muscoy Operable Unit: the 19<sup>th</sup> Street Treatment Plant, which, as of the date of entry of the Consent Decree, is under construction.

**B.** Warranty: EPA has exercised its best efforts to include in this Statement of Work all activities necessary to fulfill the Operation and Maintenance ("O&M?") requirements for the Newmark and Muscoy Operable Units, and for the Site-Wide Monitoring. However, nothing in this Statement of Work or any deliverable approved by the Lead Oversight Agency or the Support Oversight Agency pursuant hereto constitutes a warranty or representation, either express or implied, by the United States or the State of California Department of Toxic Substances Control ("DTSC") that compliance with this document and/or deliverables approved

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pursuant to this document will result in the achievement of the Performance Standards as defined in the Consent Decree (Section IV). Nothing in this Statement of Work or deliverables approved pursuantly hereto shall be deemed to limit EPA's rights pursuant to Paragraph 103 of Section XXI (Covenants by the United States and DTSC) of the Consent Decree.

C. Site Description: See Paragraph 4 of the Consent Decree (Site Definition).

D. Lead Oversight Agency Approval: Lead Oversight Agency approval of any submittal by the City, or any person who will perform Work on behalf of the City within the context of the Consent Decree, including but not limited to, plans, specifications, reports, and contractors, is administrative in nature and designed to allow the City to proceed: The City acknowledges and agrees that EPA's approval of deliverables does not constitute a warranty or representation, as discussed in Paragraph B above. Submittal by the City of a required document to the Oversight Agencies shall constitute notice to these agencies of the information contained in the submittal. EPA is the Lead Oversight Agency for review and approval of all initial plans and reports that establish requirements for or will govern Site activities, including the Reconstructed Newmark Groundwater Flow Model. All subsequent plans or report modifications that would change the requirements of a previously approved plan or report shall require EPA concurrence. The reconstructed groundwater model updates shall be approved by DTSC with EPA concurrence, or vice versa, depending on which Agency has the Lead Oversight responsibility at the time.

**E. Reporting Period:** The Reporting Period is defined in Section X, Paragraph 37 of the Consent Decree.

F. System Operation and Maintenance Requirements: The requirements for system
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operation, maintenance and monitoring are to be specified in the O&M manuals for the Newmark and Muscoy OUs. These requirements shall be included in the O&M Plan to be submitted by the City pursuant to Section II.B.4 of this Statement of Work. The O&M Plan may be periodically updated by the City, as the need arises. In all cases the City shall operate consistently with the California Constitution, Article 10, and its DHS permit. Provided, however, that should the City allege that its obligations under its DHS permit or the California Constitution prevent the City from conducting the O&M otherwise in accordance with the requirements of the Consent Decree and this Statement of Work, EPA shall have the right to take over the work in accordance with Paragraph 110 of the Consent Decree.

### II. Schedule

A. Dates: The schedule of deliverables for this Statement of Work is presented in Attachment 1 and shall be referred to as the Work Schedule. Delay by the Lead Oversight Agency in reviewing a deliverable shall not constitute a violation of the Consent Decree by the United States or DTSC, as the case may be. Once the City receives any required Lead Oversight Agency approval, comments, or other authorization or direction to proceed with the next item of work, the City is required to submit the specified deliverable within the time frame set forth in the work schedule, calculated starting from the date of receipt of the appropriate Lead Oversight Agency approval, comments or other authorization or direction to proceed. See Consent Decree, Section XI (EPA Approval of Plans and Other Submissions).

#### **B.** Items:

1. Designation of Project Coordinators: Unless already submitted to EPA and DTSC in writing, within 20 days of the entry of the Consent Decree, the City shall submit to EPA Document Number: 532407 05/11/04.

and DTSC, in writing, the name, title, address and telephone number, and qualifications of its proposed Project Coordinator, which may include the General Manager or Deputy General Manager of the Water Department. See Consent Decree, Section XII (Project Coordinators).

2. Progress Reports: The City shall provide written progress reports to the Lead or Support Oversight Agency as specified in the schedule in the Consent Decree, Section X (Reporting Requirements). The City shall include in the Progress Reports any data that the City generated or acquired as required by the Consent Decree for the period between the last Progress Report and the current Progress Report, as well as any required information generated prior to the submittal of the last Progress Report, but not included in that Progress Report. These Progress Reports shall be submitted to the Lead and Support Oversight Agency as specified in accordance with Section X (Reporting Requirements), Paragraph 37 of the Consent Decree. The City shall alert the Lead Oversight Agency within the same working day or three calendar days, whichever is shorter, if evaluation of any data indicates that a potential violation of any of the performance criteria described in Section III.F has occurred.

a) Progress Reports for the Newmark and Muscoy Facilities: Beginning the month immediately following entry of the Consent Decree, the City shall submit Progress Reports for the Newmark OU Facilities. The City shall subsequently add the Muscoy OU Facilities to Progress Reports once O&M is turned over to the City. The Progress Reports shall include at a minimum all items specified in Section X (Reporting Requirements), Paragraph 37 of the Consent Decree, and:

i) A narrative describing any noteworthy accomplishments or problems encountered at the Facilities during the Reporting Period (including, but not limited to, Document Number: 532407 05/11/04 the implementation of process improvements; routine maintenance, maintenance days claimed and credits used (see Section III.B of this Statement of Work); and a summary of any deviations from the operational requirements of the Consent Decree, the cause of such deviations, and the steps taken to mitigate such circumstances;

ii) The System Operation Date and the current year of O&M;iii) The quantity of water pumped by each Newmark/Muscoy

extraction well;

iv) After the O&M period begins for the Muscoy OU, a compliance calculation showing that average monthly flow rates are consistent with extraction well requirements provided in Section III.B.1 and III.B.2 of this Statement of Work for the North Plant extraction well network, the Newmark Plume Front extraction well network, and Muscoy Plume extraction well network, factoring in appropriate maintenance allowances or gallonage credits as provided in Section III.B.3 of this Statement of Work and extraction well pumping limits as described in Section III.B.2 of this Statement of Work. A summary of Target Extraction Rates shall also be provided, with the dates of Lead Oversight Agency approval and rationale when the Target Extraction rates are below the Design Extraction Rates.

v) After the beginning of the Muscoy O&M, the cumulative quantity of water pumped toward extraction requirements provided in Section III.B of this Statement of Work for each year of O&M for the North Plant extraction well network, Newmark Plume Front extraction (South Plant) well network, and the Muscoy Plume extraction well network, factoring in appropriate maintenance periods or gallonage credits as provided in Section III.B.3 of this Statement of Work;

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vi) The concentrations of VOCs at each extraction well and in the treatment plants' influent and effluent, including the contaminants identified in the Newmark OU and Muscoy OU RODs, as well as the Constituents of Concern ("CoCs") and the VOCs to be sampled pursuant to the State of California Department of Health Services Water Supply Permit (effective December 30, 1999) for the City of San Bernardino ("Water Supply Permit"), (listed in Attachment 9 of the Water Supply Permit);

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vii) An estimate of the mass of VOCs removed for the Reporting Period and the cumulative mass of VOCs removed since the System Operation Date; and

viii) After completion of applicable QA/QC requirements, the results of any sampling, test, or data mentioned above or otherwise required by the Consent Decree or this Statement of Work. The report of these results shall be prepared and submitted by the City pursuant to Section VIII (Quality Assurance, Sampling, and Data Analysis) of the Consent Decree.

The Progress Reports for the Newmark and Muscoy Operable Units may be combined once O&M of the Muscoy Operable Unit is transferred to the City.

b) Other Reporting:

i) The Lead Oversight Agency may require the City to report verbally or in writing the requirements of Section II.B.2 of this Statement of Work more frequently than in the Progress Reports.

ii) The Lead Oversight Agency may require the City to report additional relevant information, as necessary, in the Progress Reports or separately.

iii) The City shall submit to the Lead Oversight Agency two

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copies or summaries of compliance data submitted monthly or otherwise to the California Department of Health Services ("DHS").

3. O&M Plans: The City shall submit O&M Plan(s) for the Newmark and Muscoy Facilities pursuant to the requirements of this Statement of Work. These O&M Plans shall include all O&M activities pursuant to this Statement of Work to be performed on all portions of the Facilities to ensure that the Facilities continue to run according to specification, and where appropriate, will incorporate or refer to O&M activities already outlined in the EPA O&M document ("Draft Operations and Maintenance Manual, Newmark Operable Unit Treatment Systems"). The Newmark OU O&M plan shall be submitted in accordance with the schedule specified in Attachment 1. The Muscoy OU O&M plan shall be prepared and submitted after the Muscoy Plume extraction well network and the 19<sup>th</sup> Street Plant Facilities are declared operational and functional, in accordance with the schedule specified in Attachment 1.

a) The O&M Plans shall include detailed descriptions, including drawings, of the Facilities; manufacturer specifications for the Facilities and equipment; easily understood, stepwise standard operating procedures for the Facilities at all appropriate flow rates; startup and shutdown procedures for all Facilities; a detailed description of manual and electronic control systems; and any other elements pertaining to efficient and safe operation of the Facilities.

b) The O&M Plans shall describe in detail the routine maintenance activities to be performed on each element of the Facilities; a schedule for these routine maintenance activities; a schedule of visual inspection of the Facilities; a schedule of equipment overhauling per manufacturers' specifications; a description and schedule of cleaning and back Document Number: 532407 05/11/04.

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flushing; detailed chemical handling procedures; and any other elements pertaining to efficient and safe maintenance of the Facilities.

c) The O&M Plans for the Facilities shall incorporate by reference the City's Staffing Plan, Health and Safety Plan, Operational Sampling and Analysis Plan, Quality Assurance Project Plan, and Contingency Plan.

d) The O&M Plans for the Facilities in conjunction with the Staffing Plan shall delineate clear lines of responsibility for performing the activities referenced within the plans, especially with respect to emergency shut downs and implementation of the Contingency Plan if it becomes necessary.

e) The O&M Plans shall include a list of "trouble shooting" procedures for various operations, and identify an inventory of parts with long lead times or critical to maintain normal operations.

f) In that the Muscoy Plume extraction well network will not be on-line at the time the O&M plan for Newmark is prepared, the Muscoy O&M plan may include modifications to some operating conditions for the Newmark Plume Front and Muscoy Plume extraction well networks as a whole to reflect the design of the current system.

4. Health and Safety Plan: Unless already submitted to EPA pursuant to the Cooperative Agreement, the City shall submit Health and Safety Plans to the Lead Oversight Agency that describe the minimum health, safety, and emergency response requirements for the O&M activities at the Newmark and Muscoy Facilities, respectively. These plans shall be prepared in accordance with U.S. Occupational Health and Safety Administration ("OSHA") requirements and any other applicable requirements.

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5. Operational Sampling and Analysis Plan: The City shall submit to the Lead Oversight Agency an Operational Sampling and Analysis Plan ("OSAP") for the Facilities that defines the data gathering methods to be used during O&M. The OSAP shall be designed and implemented so as to provide sufficient information to enable the Lead Oversight Agency to determine the effectiveness of the Work the City is required to perform and whether the Facilities are meeting the Performance Standards defined in Section IV of the Consent Decree. The OSAP shall include sampling methods and schedules for all VOCs required to be sampled during O&M, consistent with the Water Supply Permit, the Newmark and Muscoy OU Interim RODs and this Statement of Work. The OSAP also shall include the analytical method for the VOCs samples (Method 524.2 or equivalent) and identify the QA/QC sampling schedules.

To address the requirements of Section VIII (Quality Assurance, Sampling, and Data Analysis) of the Consent Decree, at a minimum, the OSAP shall include a description of the City's role in the implementation of the Consent Decree and its responsibilities for sampling under the Consent Decree, a description of the sampling points and who takes samples, standard operating procedures ("SOPs") for sampling, the laboratory's analytical SOPs (includes quality control and corrective actions, preservation of samples, etc.), and target detection limits versus maximum contaminant levels. The OSAP shall describe and require the development and maintenance of a database of these sampling data according to the EPA requirements outlined in the document: "Definitions for the Minimum Set of Data Elements for Groundwater Quality (EPA813B92002)."

The OSAP shall include a description of the data analysis protocol that will be used to evaluate compliance with contaminant level performance criteria and flow performance criteria Document Number 532407 05/11/04.

described in Section III.F.1 and III.F.2 of this Statement of Work. In that the Muscoy Plume extraction well network will not be on-line at the time the OSAP is prepared, an addendum to the OSAP may be required to modify data analysis procedures and performance criteria for evaluating flow performance consistent with the provisions in Section III.F for the Newmark Plume Front and Muscoy Plume extraction well networks as a whole.

6. Contingency Plan: The City shall submit to the Lead Oversight Agency a Contingency Plan which is written for the locally affected population in the event of an accident or emergency at the Site. The Contingency Plan shall incorporate an Air Monitoring Plan and a Spill Prevention, Control, and Countermeasures Plan. The following is a suggested and nonexclusive list of items that shall be considered for inclusion in the Contingency Plan:

a) Name of the person responsible for responding in the event of an emergency incident;

b) List of key contacts in the local community and the State and Federal agencies to be involved in the cleanup, as well as local emergency squads and hospitals with phone numbers and addresses;

c) First aid and medical information, including names of personnel trained in first aid, a clearly marked map with the location of medical facilities and all necessary emergency phone numbers for fire, rescue, and local hazardous material teams;

d) An air monitoring plan to assure that the VOC treatment system for the Facilities is meeting the substantive requirements of the South Coast Air Quality Management District ("SCAQMD"). This air monitoring plan should include an evaluation demonstrating that VOC air emissions are below the threshold such that SCAQMD monitoring would not be Document Number: 532407 05/11/04. required, or if and when such monitoring would be required by SCAQMD, the plan should include the trigger concentration for implementation of the air monitoring plan, and a description of air monitoring implementation which may include personnel monitoring, and on-site and/or off-site area monitoring; and

e) A Spill Prevention, Control, and Countermeasures Plan which shall specify actions to be taken in the event of spills from materials handling and/or transportation. The plan shall describe methods, means and facilities required to prevent contamination of soil, water, atmosphere, and uncontaminated structures, equipment, or material. It shall specify provisions for equipment and personnel to perform emergency measures required to contain any spillage; to remove and properly dispose of any material that becomes contaminated due to spills; and to decontaminate affected structures, equipment, or material.

7. Baseline Mitigation Plan: The City shall submit to the Lead Oversight Agency a Baseline Mitigation Plan outlining potential responses in the case that contaminant performance and/or flow performance criteria as outlined in Sections III.F.1 and III.F.2 of this Statement of Work are exceeded and trigger Non-Routine O&M measures. The Baseline Mitigation Plan will provide a starting point for preparation of a scenario-specific Mitigation Plan if at some point implementation of a mitigation plan for Non-Routine O&M measures becomes necessary. The Baseline Mitigation Plan shall be generic in content, and, for example, shall include a basic structure for a phased approach to increasing extraction rates, a description of reporting intervals and requirements, and a list of key contact personnel. The Baseline Mitigation Plan shall also include procedures for performing a cost benefit analysis of potential Non-Routine O&M operation scenarios that will be used to guide selection of the appropriate Document Number: 532407 05/11/04.

Non-Routine O&M mitigation measure. The Baseline Mitigation Plan will include an inventory of all available treatment systems for both the Newmark and Muscoy OUs, conveyance systems, and distribution options that may be mobilized during Non-Routine O&M, and that will be considered when developing a scenario-specific mitigation plan.

8. Time Line and Schedule: Unless already submitted to EPA pursuani to the Cooperative Agreement, the City shall submit to the Lead Oversight Agency a fifty-year Time Line and Schedule for each treatment system (Newmark and Muscoy) beginning in October 1, 2000 for Newmark, and at the start of O&M for Muscoy that shall list the major milestones to be accomplished in order for the City to efficiently perform long-term O&M of the Facilities. The Time Line and Schedule shall include the items listed in the Work Schedule, and also intermediate milestone activities (such as carbon changes, or equipment change out, etc.) and any other items relevant to orderly implementation of O&M activities. The identification in the Time Line and Schedule of intermediate milestones, which are defined as those milestones not specified in the Work Schedule, is solely for planning purposes. Any failure by the City to meet the Time Line and Schedule's intermediate milestones shall not be deemed in and of itself a violation of the Consent Decree.

9. System Operation Date: The System Operation Dates for the Newmark and Muscoy Operable Units are defined as the first day each of the respective Operable Units is determined by EPA to be operational and functional as provided in the Consent Decree. In the case of the Newmark Operable Unit, the date is October 1, 2000.

C. Other Items:

1. Pre-Certification Inspection of O&M: At the end of the time period for Document Number: 532407 05/11/04.

which the City is required to perform O&M activities at each Operable Unit pursuant to the Consent Decree, the City shall schedule and conduct a pre-certification inspection as specified by the Consent Decree. EPA shall conduct a final review of records and inspection of the Facilities.

2. O&M Completion Report: Pursuant to Paragraph 57 of the Consent Decree, the City shall submit a report for each Operable Unit certifying that all O&M activities have been fully performed. The report shall include documentation (e.g., test results) substantiating that the relevant Performance Standards have been met. The report shall be a necessary part of certification of completion of the Work in accordance with Paragraph 57 of the Consent Decree.

3. Determination of Decommissioning/Dismantling of Newmark Facilities: Reimbursement for decommissioning or dismantling of Facilities shall be governed by Section VI, Paragraph 14.a.(2) of the Consent Decree. If the City elects to decommission Facilities at the end of Work, then at least ninety (90) days before such decommissioning, the City shall submit to the Lead Oversight Agency and Support Oversight Agency a statement as to whether all or a portion of the Facilities shall be decommissioned or dismantled, together with the timetable and estimated costs for such work. If the City decides to cease production, then the City shall notify EPA and DTSC, and either Agency can initiate the process of decommissioning or dismantling. If EPA or DTSC is initiating the process, the City shall have a reasonable opportunity for review and comment.

4. Submittals: The City shall submit two (2) copies of each deliverable to the Lead Oversight Agency's Project Coordinator designated in Section XXVI (Notices and Document Number: 532407 05/11/04. Submissions) of the Consent Decree, one copy each to the Lead Oversight Agency's designated remedial action oversight contractor, the Support Oversight Agency, DHS, and RWQCB, and one copy of each deliverable transmittal letter to the EPA Office of Regional Counsel and to DTSC's Counsel as designated in the Consent Decree, Section XXVI (Notices and Submissions). With the consent of the receiving agency, an electronic copy of the deliverable may be substituted.

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# III. Operation of Newmark/Muscoy Operable Units

A. Period of Operation and Maintenance: The City shall perform O&M activities on the Facilities as required under Section VI (Performance of the Work by the City) of the Consent Decree and this Statement of Work, for the period specified under Section XIV, Paragraph 57.a of the Consent Decree. O&M for each Operable Unit shall commence on the System Operation Date for each Operable Unit.

## **B.** Extraction Requirements:

1. Definition of Extraction Rate Terms: The "Maximum Routine Extraction Rate" requirements are defined as the maximum extraction rates at which the City will be required to operate the extraction well networks under the terms of Routine O&M. The "Design Extraction Rate" is defined as the Newmark Groundwater Flow Model-derived flow rate used as the design basis for each extraction well network. The "Target Extraction Rate" requirements are defined as the flow rates that can vary up to the Maximum Routine Extraction Rates prescribed with the intention of meeting the performance criteria established in Section III.F of this Statement of Work. Target Extraction Rates can be modified pursuant to the terms of this Statement of Work, subject to Lead Oversight Agency approval. The Maximum Routine Document Number: 532407 05/11/04.

Extraction Rates and Target Extraction Rates will include adjustments for maintenance allowances as described in Section III.B.3 of this Statement of Work. The "Non-Routine Extraction Rates" are defined as extraction rates at which the City may be required to operate the Newmark Plume Front and/or Muscoy Plume extraction well networks that are in excess of the Maximum Routine Extraction Rates during periods of Transition Phase Operations or Non-Routine O&M operations.

2. Extraction Requirements: The design flow rates specifications for the extraction wells and treatment plants from the Newmark OU RD and the Muscoy OU RD Final Basis of Design Reports are summarized in Attachment 2.

Under certain circumstances, changes in hydrologic conditions of the pumped aquifer will result in reductions of the extraction rates for which the affected extraction well network can be safely operated. These changes in hydraulic conditions may result in declines in extraction rates for the affected extraction well network to levels below the Target Extraction Rate requirements then in force. If changing hydrologic conditions result in production from any extraction well network below the Target Extraction Rate then in force, the City shall notify the Lead Oversight Agency within one working day or three calendar days (whichever is less) from the calculation of the 3-month rolling average. The City shall submit the appropriate analysis within 30 days of reporting the three month rolling average flow rate in which such shortfall occurs to demonstrate the necessity of the change in pumping rate. If a more time consuming analysis is needed for the City to demonstrate the hydraulic changes, the City shall provide to the Lead Oversight Agency for approval a work plan and schedule for completion of this analysis within the 30 day period.

The provisions of this Statement of Work contemplate conditions in which the City may Document Number: 532407 05/11/04.

propose to operate at extraction rates below the then in effect Target Extraction Rate (see Section III.F.2.d) while maintaining performance criteria. The City shall submit to the Lead Oversight Agency an analysis to justify the Target Extraction Rate for the extraction well network whenever it is proposed to be operated below the Design Extraction Rate and obtain approval to operate at such rate, consistent with the provisions stated in Section III.F.2.d.

a) Newmark Plume Front and Muscoy Plume Extraction Well Networks: The initial Target Extraction Rate requirements will be set at the Design Extraction Rate. The Design Extraction Rates believed by EPA to be necessary under current hydrologic conditions to meet the hydraulic and mass removal requirements of the Newmark and Muscoy RODs are 8,800 gallons per minute (gpm) for the Newmark Plume front extraction well network, and 8,900 gpm for the Muscoy Plume extraction well network. These are the Newmark Groundwater Flow Model-derived extraction rates, which EPA calculates are currently needed to inhibit migration of the contaminant plumes under the modeled conditions. These initial Target Extraction Rates may be modified by the Lead Oversight Agency or the City with Lead Oversight Agency approval, if the performance criteria are being achieved under the terms described in Section III.F.2, or if hydrologic conditions of the basin are not sustainable for such pumping rates. The total Muscoy Design Extraction Rate mentioned above may be revised downward, based upon the results of the pump tests on the Muscoy extraction wells, which are currently under construction, and the results of the performance evaluation.

The initial Target Extraction Rates, adjusted for Annual Maintenance Allowances as discussed in Section III.B.3 of the Statement of Work, are 4.182 x 10<sup>9</sup> gallons per year and 4.229 x 10<sup>9</sup> gallons per year for the Newmark Plume front extraction well network and Muscoy Plume Document Number: 532407 05/11/04.

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extraction well network, respectively.

The Maximum Routine Extraction Rates for the Newmark Plume Front extraction well network and Muscoy Plume Extraction well network are set at 100 percent of the combined effective treatment capacity for the Newmark Plume Front Treatment Facilities and the 19<sup>th</sup> Street Treatment Plant as defined in Section III.C.1 (20,016 gpm), divided equally between the two extraction well networks. Therefore, the Maximum Routine Extraction Rates for the Newmark Plume Front extraction well network and Muscoy Plume Extraction well network are 10,008 gpm and 10,008 gpm, respectively. Adjusted for Annual Maintenance Allowances as discussed in Section III.B.3, the Maximum Routine Extraction Rates are 4.756 x 10<sup>9</sup> gallons per year and 4.756 x 10<sup>9</sup> gallons per year for the Newmark Plume Front extraction well network and Muscoy Plume extraction well network, respectively. These Maximum Extraction Rates only apply to the well network. The combined effective treatment capacity of the Newmark and Muscoy plume front is 9.512 x 10<sup>9</sup> gallons per year.

Beginning with the initiation of O&M for the Muscoy OU, the City shall demonstrate compliance with the initial Target Extraction Rate requirements on each anniversary of the applicable System Operation Date, which is defined in Section II.B.9 of this Statement of Work, unless the Lead Oversight Agency, relying on the EPA-approved Reconstructed Newmark Groundwater Flow Model or upon a review and analysis of applicable groundwater level data, per the methodology established in Section III.F.2, shall approve a lesser volume as sufficient, in which case the City shall demonstrate compliance with the lesser volume requirement. For each year of operation, beginning on the System Operation Date, and ending on the day before the spotent Number: 532407\_05/11/04.





Newmark Plume Front extraction wells and the Muscoy Plume extraction wells network have extracted groundwater at an average monthly flow rate equivalent to the Target Extraction Rate adjusted for Annual Maintenance Allowances applied on a three month rolling average as defined in Section III.B.3. The target average monthly flow rate is calculated by dividing the approved annual Target Extraction Rate (including the annual maintenance allowance used by the City) by twelve. The actual average will be calculated by dividing the sum of the total flow for the most recent three months by three. The actual average monthly flow rate must meet or exceed the target average monthly flow rate to be in compliance.

b) North Plant Extraction Well Network:

The North Plant extraction well network was initially intended to be operated at the Design Extraction Rate of 3,900 gpm; however, this rate historically has not been sustainable due to the basin hydrologic conditions. Therefore, the City shall submit to the Lead Oversight Agency an analysis to justify the Target Extraction Rate for the North Plant extraction well network whenever it is proposed to be operated below the Design Extraction Rate of 3,900 gpm and obtain approval to operate at such rate, as discussed above. Annual Maintenance Allowances will be applied to the Target Extraction Rates for the North Plant extraction well network per the terms provided in Section III.B.3 of this Statement of Work.

c) Water Production In Excess of City Demand

It is expressly contemplated in this Statement of Work that the City may occasionally be required to produce water in excess of its demand. In such cases, and in order to put the excess water to beneficial use, the City may provide excess water to other public water systems in the area for augmentation of their supply or other beneficial use. For sale of water to other water or Document Number: 532407 05/11/04. public agencies, any proceeds will be divided in a proportionate calculation, taking into account the cost of production and delivery (to be returned to the City) and cost of treatment (to be returned to the applicable investment vehicle). Any proceeds above total costs shall be returned to the applicable investment vehicle. This calculation shall be made annually.

3. Annual Maintenance Allowance: The Annual Maintenance Allowance shall be measured in units of gallons and shall be used as a means for the City to perform a certain amount of routine maintenance on the Facilities without violating the extraction requirements. For each extraction well network this annual maintenance allowance figure shall be calculated as the volume which could be produced by each extraction well network at the applicable Target Extraction Rate described in Section III.B.2 for a period of 35 days. The Annual Maintenance Allowance will also be used as a means of measuring compliance with the limits set for Suspension of Operations (Section III.J). Notwithstanding the Annual Maintenance Allowance, the City shall operate the three extraction well networks in such a manner that the Target Extraction Rates described in Section III.B.2 are achieved, unless reduced pursuant to that Section, or unless reduced due to extraction well network outages caused by Force Majeure conditions as defined in Section XVIII of the Consent Decree. Extraction well network outages due to Force Majeure conditions do not count against the Annual Maintenance Allowance.

The Annual Maintenance Allowance shall be applied on a three month rolling monthly average so that the average flow rate across any three consecutive months must exceed 1/12 of the annual Target Extraction Rate, as defined in Section III.B.2.a and III.B.2.b of this Statement of Work, factoring in the Annual Maintenance Allowance of 35 days a year. Based on the initial Target Extraction Rates described in Section III.B.2 of this Statement of Work, the minimum Document Number: 532407 05/11/04.

three month rolling average extraction rate shall be equal to  $3.485 \times 10^8$  gallons per month and 3.524 x 10<sup>8</sup> gallons per month for the Newmark Plume Front and Muscoy Plume extraction well network, respectively, factoring in the appropriate Annual Maintenance Allowances. The minimum three month rolling average extraction rate will be adjusted if the Target Extraction Rates are modified pursuant to the provisions described in Section III.F.2 of this Statement of Work. The three month rolling average for the North Plant extraction well network will be calculated in the same manner, and if it is below the Target Extraction Rate then in force due to aquifer conditions, then justification and the appropriate analysis, or a workplan of the appropriate analysis if more time is needed, shall be provided for approval by the Lead Oversight Agency within 30 days of submission of the three month rolling average. During maintenance periods for the treatment systems, the City may divert extracted water for treatment to available City or State-constructed treatment systems as a reimbursable expense under the Escrow in order to maintain required flow rates. Non-Routine Extraction Rates prescribed through a mitigation plan as discussed in Section III.F.2.a of this Statement of Work that have been implemented shall also be adjusted to accommodate the Annual Maintenance Allowance.

## C. Treatment Criteria and Requirements:

1. Treatment Capacity. The treatment capacity of the Newmark and Muscoy Facilities is the volume of water that can be effectively treated by the GAC vessels. Treatment capacities discussed below are summarized in Attachment 2. The volume that can be effectively treated by the GAC vessels is defined as 96% of the GAC vessel rating (i.e. 720 gpm for 20,000 pound carbon vessels, and 1,008 gpm for 30,000 pound carbon vessels). The 96% effective treatment capacity is based on meeting design specifications for a minimum 15-minute hydraulic Document Number: 532407 05/11/04. contact across the GAC vessels. Due to the degree of daily variability in vessel flow rate, a four percent buffer is required to remain in compliance with the hydraulic contact time requirement.

The total effective treatment capacity of all the treatment facilities (at 96% of the maximum = 25,056 gpm) was designed based on the initial Target Extraction Rates set forth in Section III.B.2, at approximately 16% above the initial total required Target Extraction Rates (21,600 gpm) for all the wells in the Newmark and Muscoy systems (see Attachment 2). For the Newmark Plume Front and Muscoy Plume extraction wells and corresponding treatment facilities only, the treatment capacity is about 13% above the design extraction rates. The North Plant Treatment Facilities are designed to treat a maximum of 2.395 x 10<sup>9</sup> gallons per year at 5,040 gpm (maximum plant flow) for 330 days per year, with a 35-day allowance for routine maintenance per year. The Newmark Plume Front Treatment Facilities (the South Plant, including the Waterman and the 17th Street Treatment Plants) are designed to treat 3.764 x 109 gallons per year at 7,920 gpm for 330 days per year, with the same 35-day allowance for routine maintenance per year. The Muscoy Treatment Facilities are being designed to treat 5.748 x 10<sup>9</sup> gallons per year at 12,096 gpm for 330 days per year at the 19<sup>th</sup> Street Plant. Since the extraction well capacity from the Newmark Plume Front Extraction Well network is higher than the Newmark South Plant treatment capacity, a portion of the water extracted in the Newmark Operable Unit and currently treated at the Waterman Treatment Plant will be treated at the Muscoy Treatment Facilities in the future, once this system is on line.

2. Design Criteria for Contaminant Treatment: The GAC Treatment Facilities were designed to treat PCE and TCE in the groundwater to meet current applicable drinking water standards.

#### 3. Treatment Requirements:

a) The Facilities shall achieve the following standards during Operation and Maintenance: Groundwater shall be extracted and treated to meet the ARARs set forth in the Newmark and Muscoy OU RODs for the VOCs identified in the Newmark and Muscoy OU Interim RODs, and the Water Supply Permit. For VOCs identified in the Water Supply Permit, but not identified in the Newmark and Muscoy OU Interim RODs or the Final Design Reports (including the Final 100 Percent Design Submittal, Newmark OU Remedial Design, Newmark Groundwater Contamination Superfund Site, North Plant, and Final 100 Percent Design Submittal, Newmark OU Remedial Design, Newmark Groundwater Contamination Superfund Site, South Plant), groundwater shall be extracted and treated to meet the Water Supply Permit limits or Federal or State MCL requirements, whichever are more stringent. Method 524.2 (or equivalent) will detect additional VOCs beyond the VOCs included in the documents listed above. Any such additional VOCs detected are to be reported as per Section II.B.2.a.vi, and viii of this Statement of Work.

b) The City shall accept the treated groundwater, chlorinate and/or disinfect the treated groundwater in accordance with accepted practice, the requirements of its Water Supply Permit and of Paragraph III.J.1 of this Statement of Work, and deliver the water into the City's potable water supply system or otherwise put it to beneficial use in another agency.

**D. Monitoring Requirements**: The City shall monitor the effectiveness of the system through the monitoring and sampling of the existing extraction and monitoring well networks. The monitoring of the extraction and monitoring wells shall be completed in accordance with the

approved QA/QC requirements stated in Section III.E, QA/QC requirements, below.

Groundwater sampling and water level measurements will be collected in accordance with an approved OSAP to be developed by the City pursuant to Section II.B.6 of this Statement of Work and approved by the Lead Oversight Agency. The OSAP shall cover the extraction wells, the Site-Wide Monitoring, and treatment system monitoring programs as described below.

 Extraction Wells Monitoring: In order to evaluate the performance of the Newmark Operable Unit and Muscoy Operable Unit extraction well networks, the City shall monitor the water levels and the contaminant concentrations in the following wells: i) the extraction wells (wells prefixed with EW) to evaluate mass removal and contaminant trends;
 ii) the down gradient monitoring wells (wells prefixed with MW) for network break through; and
 iii) up gradient monitoring wells (wells prefixed with MW) for early warning of contaminant spikes or changes.

a) For water level measurements, levels shall be collected on an ongoing basis with the aid of an electronic data acquisition system (data loggers), for purposes of monitoring the capture zone created by the extraction well networks. Water level measurements will be collected on a daily basis from the following wells, unless noted otherwise:

i) Newmark Plume Front (South Plant) wells:

EW1 (monthly water levels only) PA & PB

EW2 (monthly water levels only) PA & PB

EW3 (monthly water levels only) PA & PB

EW4 (monthly water levels only) PA & PB

EW5 (monthly water levels only) PA & PB

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MW 10 A & B (up gradient)

MW 11 A, B, & C (up gradient)

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MW 12 À & B

MW 13 A, B, & C

MW 14 A & B

MW 15 A & B

ii) Newmark North Plant wells:

EW6 (monthly water levels only) PA

EW7 (monthly water levels only) PA

Newmark 3

MW 04 A & B

MW 07 A & B (up gradient)

MW 09 A & B (up gradient)

MW 16 A & B

MW 17 A & B

iii) Muscoy Plume Wells:

EW 108 (monthly water levels only) PA & PB

EW 109 (monthly water levels only) PA & PB

EW 110 (monthly water levels only) PA, PB, PC & PD

EW 111 (monthly water levels only) PA, PB, PC, PD & PE

EW 112 (monthly water levels only) PA & PB

MW 135 A, B, C

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MW 136 A, B, C MW 137 A, B, C MW 138 A, B, C MW 139 A, B, C MW 128 A, B, C (up gradient) MW 129 A, B, C (up gradient) MW 130 A, B, C (up gradient)

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b) The above wells are to be sampled semi-annually for VOCs only using EPA Method 524.2 (or an EPA-approved equivalent), or quarterly as the sampling schedule is modified per Section III.F.1.a of this Statement of Work. Additional analyses which may be required as part of the Water Supply Permit are not part of the requirements of this Statement of Work.

2. Site-Wide Monitoring: Site-Wide monitoring will include additional Site-Wide ground water level monitoring and sampling to aid in evaluating the combined Newmark and Muscoy Operable Units extraction network effectiveness, provide for establishing Site-Wide ground water background elevations, and evaluate Site-Wide contamination. The Site-Wide monitoring will consist of a monthly water level monitoring program and annual sampling program. The Site-Wide water level monitoring program will consist of a modification of the City of San Bernardino's existing water level monitoring program and some additional existing monitoring wells. These modifications will be determined by EPA and are anticipated to consist of minor schedule changes and a QA/QC program (to assure accuracy of water level data). The sampling program will consist of sampling and VOC analysis from the wells specified in

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Sections III.D.2.b and III.D.2.c of this Statement of Work on an annual basis. If any monitoring program described in this Statement of Work (described below) is also required by the Water Supply Permit or any amendment to the Water Supply Permit, the more stringent program of the  $\bigcirc$  two shall be required.

a) The City will collect monthly water levels from the wells specified in Section III.D.2.b of this Statement of Work for the Newmark and Muscoy Operable Units. This data will be used in conjunction with the daily water level data (see Section III.D.1. above) to evaluate the overall aquifer response to extraction and set a baseline to compare extraction well drawdown. Additionally, the City shall sample the Site-Wide wells for VOCs using EPA Method 524.2 (or an approved equivalent) on an annual basis. This annual sampling event shall be scheduled concurrent with the corresponding semi-annual sampling event for the extraction well monitoring to assure data comparability.

b) The following wells shall be monitored and sampled (if functional at the time of Consent Decree entry):

MW 08 A & B MW 06 A & B MUNI 01 (Devil Canyon #1) MUNI 07 B & C (DTSC Site #1) MUNI 09 B & C (DTSC Site #2) MUNI 11 A & C (DTSC Site #3) MUNI 14 (31<sup>st</sup> Street and Mt. View) MUNI 16 (Leroy)

MUNI 18 (27th and Acacia)

MUNI 20 (23rd Street)

MUNI 22 (16<sup>th</sup> Street)

MUNI 24 (Gilbert Street)

MUNI 112 (Cajon #3)

MUNI 116 (Muscoy Mutual #5)

MUNI 108 (Mallory)

MUNI 109 (Paperboard)

MUNI 107 (Colima) (The current well has failed and cannot be used for monitoring. EPA intends to replace the well. The replacement well will be included in the Site-wide monitoring.) MUNI 103 (State Street) MUNI 101 (Olive and Garner) PZ 124 PZ 125 MW 126 SCANNED

MW 127 A, B

c) Additional Site-Wide data collection may be required to evaluate the integrity and effectiveness of the Interim Remedial Actions, as specified in Section III.K.2, Potential Non-Routine O&M, or in new monitoring wells to replace existing wells which might have to be retired from the monitoring program due to failure.

d) The City shall maintain the above referenced wells. The City shall

replace at its own cost any such well that fails because of the City's negligence. The City shall replace any such well that fails for other reasons, but may charge the cost against the financial limits for Non-Routine O&M.

3. Treatment System Monitoring: The City shall monitor the GAC treatment system in accordance with the Water Supply Permit. If the Water Supply Permit should be modified with respect to any such sampling, the City shall continue to conduct, at a minimum, such sampling as specified in the current Water Supply Permit unless the Lead Oversight Agency approves an alternate sampling regime. Such monitoring shall include but shall not be limited to:

a) daily residual chlorine sampling;

b) weekly combined treatment plant effluent sampling and analysis by EPA Method 502.22 (or an EPA approved equivalent);

c) monthly sampling of the lead vessel effluent and analysis by EPA Method 502.2 (or an EPA approved equivalent); if breakthrough is observed from the 75% point of the Lag GAC vessel, a second sample will be collected; and

d) quarterly sampling of the combined plant influent and effluent and analysis for VOCs using EPA Method 524.2 (or an EPA approved equivalent); this sample will also be used to meet the weekly combined plant effluent requirement outlined above (III.D.3.b ).

4. Treatment System Physical Inspection: The City shall conduct daily visual inspections for leakage; and monitor the system operating conditions, including volume, electronic monitoring of flow rate and pressure drop across the carbon vessels on a daily basis. Observations of, or responses to any problems that may affect the operation of the system shall be logged and summarized in the applicable O&M Progress Report.

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E. QA/QC Requirement: The City shall submit to the Lead Oversight Agency a Quality Assurance/Quality Control Plan which covers all aspects of the system monitoring and data collection. This plan shall be written and implemented in accordance with the following requirements and guidance and any modifications or supplements to such guidance as may be issued by EPA:

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- EPA Requirements for Quality Management Plan (QA/R-2) EPA/240/B-01/002;
- EPA Requirements for Quality Assurance Project Plans (QA/R-5) EPA/240/B-01/003;
- Guidance on Quality Assurance Project Plans (G-5) EPA/600/R-98/018;
- Guidance for Data Quality Objectives Process (G-4) EPA/600/R-96/055; and
- Definitions for the Minimum Set of Data Elements for Groundwater Quality EPA/813/B-92/002.

**F.** Monitoring Data Evaluation: The City shall evaluate the effectiveness of the Newmark Plume Front and Muscoy Plume extraction well networks on a regular basis, including, but not limited to, evaluating the following criteria in comparison to the results of the monitoring requirements described above in Section III.D. Before the City shall be required to conduct O&M on the Muscoy Operable Unit, EPA shall first demonstrate that the performance criteria set forth in this section, or as made less restrictive by EPA, are met while operating at Design Extraction Rates or at lesser rates determined by EPA. To the extent consistent with Section VI, Paragraph 17 of the Consent Decree, the performance criteria may be updated by the City with Lead Oversight Agency approval and EPA concurrence to be consistent with the Reconstructed Newmark Groundwater Flow Model, which will be developed pursuant to Section III.G of this Statement of Work.

## 1. Contaminant Level Performance Criteria:

a) Extraction Wells and Monitoring Wells Networks:

The City shall evaluate the contaminant levels present in the groundwater pursuant to the criteria described in the Newmark and Muscoy OU Interim RODs. The RODs incorporate certain state or federal drinking water standards as ARARs. Monitoring results shall be evaluated and compared to the ARARs to assist in evaluation of the designed extraction and treatment requirements and the calculation of mass removal of VOCs.

Contaminant performance shall be evaluated based on the results of periodic monitoring of select down gradient monitoring wells as prescribed in Section III.D.1.b of this Statement of Work. For the Newmark Plume Front extraction well network, contaminant performance shall be based on sampling results for down gradient monitoring well clusters MW-12, MW-13, MW-14 and MW-15. For the Muscoy Plume extraction well network, contaminant performance evaluation shall be based on sampling results for down gradient monitoring well clusters MW-135, MW-136, MW-137, MW 138 and MW-139. Any future monitoring wells installed down gradient of the Muscoy OU extraction well network will undergo a separate evaluation based on the location; hydrogeologic conditions and pre-existing contaminant performance evaluation program. The decision whether to include these new monitoring wells in the contaminant performance evaluation program shall be made by EPA after considering comments, if any, provided by the City and DTSC during a 60-day comment period.

i) For preexisting conditions in the Muscoy OU only: Due to preexisting contamination conditions occurring downgradient of the Muscoy Plume Extraction

well network, the following activities may be implemented:

(1) During the anticipated one year period between Musco Plume extraction well network and treatment plant startup and EPA's declaration that the Muscov OU is operational and functional (one-year performance evaluation period), EPA will decide whether some of the Muscoy OU down gradient monitoring wells identified in Section III.F.1.a above may need to be temporarily suspended from the contaminant performance evaluation program. This decision will be made based on criteria set forth in this Paragraph. While a particular well is suspended from the contaminant performance evaluation program, the City shall collect quarterly groundwater samples to evaluate potential reinstatement of the well into the contaminant performance evaluation program. If, during the one year performance evaluation period, PCE or TCE is reported in groundwater samples collected from any of the down gradient monitoring wells in excess of 1.0 ug/L, the affected well will be suspended from the contaminant performance evaluation program. Monitoring wells suspended pursuant to this provision will be reinstated for contaminant performance evaluation at such time that contaminant levels in the monitoring well samples for the particular well are below 1.0 ug/L over eight consecutive quarters of sampling.

(2) During the first year of O&M, the City may request that EPA re-evaluate whether or not any of the downgradient Muscoy OU monitoring wells should be suspended from the contaminant performance evaluation. In making this decision, EPA will consider the criteria set forth in this Paragraph, the criteria set forth in Section III.F.1.a.ii below, and other factors relevant to a determination whether the well reflects system performance.

ii) For all other operations at all times:

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Criteria for evaluating contaminant performance shall be as follows, unless otherwise specified by EPA as a result of the one-year performance evaluation period, during the first year of O&M, or a Modification to the Statement of Work:

(1) If the analysis of monitoring results indicates that the concentration of VOCs or other CoCs (as defined in the Water Supply Permit) in the monitoring wells down gradient of the Newmark Plume Front and Muscoy Plume extraction well networks identified in Section III.F.1.a of this Statement of Work are showing an increasing concentration trend, the sampling frequency may, at the discretion of the Lead Oversight Agency, be increased to quarterly during a Transition Phase period of one year in order to determine if the increased concentrations are transitory in nature or represent a more long term trend.

After one year of Transition Phase quarterly groundwater data is collected, the City shall reevaluate the concentration trend for the affected well and report the results and the City's interpretations and recommendations to the Lead Oversight Agency. Based on the results of the trend analysis, potential responses may be considered by the Lead Oversight Agency as discussed in Section III.K.2.a. (Potential Non-Routine O&M). The process for trend analysis will be established in the Operational Sampling and Analysis Plan described in Section II.B.6.

(2) If monitoring results indicate that the concentrations of VOCs or other CoCs (as defined in the Water Supply Permit) in any of the monitoring wells down gradient of the Newmark Plume Front and Muscoy Plume extraction well networks identified in Section III.F.1.a of this Statement of Work exceed one-half the State or Federal MCL (whichever is more stringent), the City shall collect a confirmation sample from the affected well within one month of validating the original laboratory data. If the confirmation

sample exceeds one-half the State or Federal MCL (whichever is more stringent), the sampling frequency for the affected well shall be increased to quarterly during a Transition Phase period of us one year in order to determine if the increased concentrations are transitory in nature or represent a more long term trend.

After one year of Transition Phase quarterly groundwater data is collected, the City shall reevaluate the concentration trend for the affected well and report the results, interpretations and recommendations to the Lead Oversight Agency. Based on the results of the trend analysis, potential responses may be considered by the Lead Oversight Agency as discussed in Section III.K.2.a (Potential Non-Routine O&M). The process for trend analysis will be established in the Operational Sampling and Analysis Plan described in Section II.B.6 of SOW.

(3) If monitoring results indicate that the concentrations of VOCs or other CoCs (as defined in the Water Supply Permit) in any of the monitoring wells down gradient of the Newmark Plume Front and Muscoy Plume extraction well networks identified in Section III.F.1.a of this Statement of Work exceed the State or Federal MCL (whichever is more stringent), the City shall collect a confirmation sample from the affected well within one month of validating the original laboratory data. If the confirmation sample exceeds the State or Federal MCL (whichever is more stringent) the City will report the results, interpretations and a recommended mitigation approach to the Lead Oversight Agency. The Lead Oversight Agency will review the City's recommended mitigation approach and at its discretion approve or modify the approach within the limits of Non-Routine O&M discussed in Section III.K.3.a of this Statement of Work.

(4) If new VOCs or CoCs (other than those previously

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identified in the Newmark/Muscoy OU RODs and the Water Supply Permit) above or near MCLs or other action levels are detected in the extraction or monitoring wells, the Lead Oversight Agency may proceed to modify this Statement of Work to require additional Work in accordance with Section VI, Paragraph 17 of the Consent Decree up to the financial limits provided in that Paragraph if such additional work would require Non-Routine O&M, and in accordance with other applicable provisions of the Consent Decree.

b) Treatment System: In the event that the concentration of the VOCs in the influent to the GAC vessels exceeds the design criteria described in the Final Design Reports, the City may be required to change out the carbon in the GAC vessels at more frequent intervals than indicated by the initial design.

#### 2. Flow Performance Criteria

At the time the Muscoy Plume extraction well network and the 19<sup>th</sup> Street Treatment Plant are declared to be Operational and Functional, EPA will demonstrate that the Muscoy Plume extraction well network meets the flow performance criteria as defined in this Section while operating at or below the initial Design Extraction Rates of 8900 gpm. All the Flow Performance Criteria discussed below are based on the Design Extraction Rates established at the times the systems are determined to be Operational and Functional.

a) Routine Performance Criteria: The City shall implement the steps prescribed by this Statement of Work in order to maintain extraction flow rates such that an inward gradient is maintained across each of the Newmark Plume Front extraction well network and the Muscoy Plume extraction well network. The inward gradient must be the result of coalescing cones of depression from the Newmark Plume Front (South Plant) extraction wells

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(EW-1 through EW-5), and the Muscoy Plume Front extraction wells (EW-108 through EW-112). The induced inward gradient shall be monitored through the use of ground water level data obtained from the water level monitoring program.

b) Routine Performance Criteria Analysis: Water level data will be evaluated with a combination of gridding/contouring methods to approximate the potentiometric surface of the pumped aquifer, and particle tracking to evaluate the degree of inhibition created by operating the Newmark Plume Front and Muscoy Plume extraction well networks. The potentiometric surface and/or particle tracking will be approximated based on water level data using software programs like the General Particle Tracking (GPTRAC) module of the Wellhead Protection Area (WHPA) program (developed by the EPA), Surfer<sup>®</sup> for Windows (Golden Software, Inc.), Tecplot (Amtec Engineering) or an acceptable equivalent, as approved by the Lead Oversight Agency. Particle traces will be calculated based on one of the above approximated potentiometric methodologies or acceptable equivalent, as approved by the Lead Oversight Agency. The methods for estimating the potentiometric surface and calculating particle traces will be established in the Operational Sampling and Analysis Plan discussed in Section II.B.6 of this Statement of Work and approved by the Lead Oversight Agency, and shall include input parameters to be used by one of the above software (or acceptable equivalents, as approved by LOA) and starting particle locations for the Newmark Plume Front extraction well network and Muscoy Plume extraction well network.

Maintenance of the inward gradient shall be demonstrated through the use of particle tracking simulations wherein a minimum percentage of the particles is recovered by the Newmark Plume Front and Muscoy Plume extraction well networks as a measure of a sufficient

level of inhibition of groundwater flow (inhibition criteria) across these extraction well networks. When Target Extraction Rates for the Newmark Plume Front and Muscoy Plume extraction well networks are set equivalent to or above the Design Extraction Rate, the inhibition criteria will be set at a minimum of 85 percent particle recovery for the Newmark Plume Front extraction well network and the Muscoy Plume extraction well network. When Target Extraction Rates for the Newmark Plume Front and Muscoy Plume extraction well networks are set below the Design Extraction Rate, the inhibition criteria will be set at a minimum of 95 percent particle recovery. In order to decrease the Target Extraction Rate for one or both of the extraction well networks to levels below the Design Extraction Rate, 95 percent particle capture shall have been demonstrated for the extraction well network(s) for the preceding 6-month period.

c) Process for non-routine flow performance response: In the event that evaluation of water level data indicates that flow performance criteria are not met, the following actions shall be taken:

i) Collect a second round of water levels within 7 days and perform flow performance data analysis. If the second round of water levels indicates that flow performance criteria are met, no further action is required.

ii) If the Target Extraction Rate is below the Design Extraction Rate, and the second round of water levels indicates that flow performance criteria are not met, the Target Extraction Rate will be increased to the Design Extraction Rate. In this case flow performance will be reevaluated at the Design Extraction Rate during the next monthly site-wide water level monitoring event prior to taking any additional steps.

iii) If the second round of water levels indicates that flow

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performance criteria are not met and the Target Extraction Rate is equivalent to or above the Design Extraction Rate, the Lead Oversight Agency shall be notified within 7 days. The City shall attempt to reestablish flow performance by adjusting Target Extraction Rates within the established limits of the Maximum Routine Extraction Rates. In this case, flow performance will be reevaluated at the increased extraction rates during the next monthly site-wide water level monitoring event prior to taking any additional steps.

iv) If particle tracking using the site-wide water level monitoring data indicates that flow performance has not been achieved, and extraction rates have been increased to the Maximum Routine Extraction Rates, a Transition Phase will begin in which the cause of the loss of flow performance will be investigated by the City and the Baseline Mitigation Plan described in Section II.B.8 will be used by the City to prepare a scenario-specific Mitigation Plan for Non-Routine O&M operations. The Reconstructed Newmark Groundwater Flow Model may be used to evaluate mitigation alternatives.

During the Transition Phase, the City will increase extraction rates above the Maximum Routine Extraction Rate within the extraction, conveyance, treatment and distribution capabilities of the City's existing systems. During the Transition Phase, the flow performance criteria for the affected extraction well network will be adjusted. For the Newmark Plume Front extraction well network and the Muscoy Plume extraction well network, the Transition Phase particle recovery criteria will be set at 80 percent. The Transition Phase will last up to six months while the Mitigation Plan is prepared and reviewed by the Lead Oversight Agency. With the agreement of the Lead Oversight Agency, the subsequent mitigation plan may include proposed reductions in particle recovery criteria while operating under Non-Routine O&M conditions.

Once the Mitigation Plan is prepared and approved by the Lead Oversight Agency, and the six-month Transition Phase has been completed, and if performance criteria have not yet been reestablished within the Maximum Routine Extraction Rates, the Mitigation Plan for Non-Routine O&M operations shall be implemented within the limits set forth in Section III.K.2 and III.K.3 of this Statement of Work and in accordance with Section VI, Paragraph 17 of the Consent Decree, if the work involved non-routine O&M. If inhibition criteria are not being consistently maintained, the Lead Oversight Agency may require additional monitoring wells to be installed as part of Non-Routine O&M to more accurately delineate the inward gradient as discussed in Section III.K.2 and III.K.3 of this Statement of Work, subject to the financial limits in Section VI, Paragraph 17 of the Consent Decree, if the work involved non-routine O&M.

d) Criteria for flow reduction to below Design Extraction Rates: In the event that the evaluation of water level data with respect to flow performance indicates that Target Extraction Rates are in excess of levels required to maintain flow performance at 95% particle recovery and have been so over a six-month period, the City or the Lead Oversight Agency may request a reduction in Target Extraction Rates. The Lead Oversight Agency's and City's requests shall be submitted in writing, and shall include supporting data and corresponding analysis that demonstrates that the proposed Target Extraction Rates are capable of meeting flow performance criteria.

If proposed by the City, the request for reduction of Target Extraction Rates shall be submitted to the Lead Oversight Agency for review. The Lead Oversight Agency shall review the City's request for modifying Target Extraction Rates and provide comments and/or approval. The request may be submitted by the City after a period of four months of flow performance

compliance under the stipulation that Target Extraction Rate reduction will not occur prior to completion of the six-month period of flow performance compliance. The two intervening months will provide a parallel track for Lead Oversight Agency review such that the Target Extraction Rate reduction can occur at the end of the six-month period if deemed appropriate by the Lead Oversight Agency. If approved, the revised Target Extraction Rates shall be implemented.

If the Lead Oversight Agency proposes to reduce the Target Extraction Rates, the Lead Oversight Agency shall make the proposal in writing, and the City may either accept the proposed change or submit comments within thirty days of the proposal. After reviewing the City's comments and any other relevant data, the Lead Oversight Agency will issue a decision regarding imposing a reduction in Target Extraction Rates. The City's right to dispute the Lead Oversight Agency's decision shall be based on Section XIX, Paragraph 84 of the Consent Decree (Dispute Resolution).

The Target Extraction Rate for an extraction well network may not be reduced below the Design Extraction Rate under conditions in which monitoring data for any of the down gradient monitoring wells identified for contaminant performance monitoring (see Section III.F.1.a of this Statement of Work) trigger additional monitoring or mitigation (as outlined in Section III.F.1.a of this Statement of Work) for that extraction well network.

If the Target Extraction Rate for one of the extraction well networks is below the Design Extraction Rate at such time that review of contaminant performance indicates that additional monitoring under a Transition Phase or mitigation measures is required, the Target Extraction Rate for the affected extraction well network shall be promptly increased to the Design

Extraction Rate.

G. Groundwater Flow Model Reconstruction Requirements: The City will reconstruct the Newmark Groundwater Flow Model pursuant to a schedule approved by the Lead Oversight Agency. The City has already prepared and submitted a model reconstruction scoping document to EPA. The City shall finalize the scope of model reconstruction activities in a work plan to be submitted to EPA. The final model reconstruction work plan is required to include a discussion of modeling objectives, an outline of the modeling approach, a description of the key modeling tasks, a description of the types and sources of data that will be compiled, a discussion of the key elements to be considered during conceptual model development, an approach for model calibration, verification and sensitivity analysis and a description of the predictive scenarios to be considered. The model reconstruction work plan is also required to include a schedule for completion of the model reconstruction effort, the reporting requirements, and a review process for all major stakeholders. The process for major stakeholder review of the model reconstruction work plan, model reconstruction report and model update reports shall include written notice from the City to the major stakeholders and at least a 30-day comment period, and will be identified in the work plan and approved by EPA. The work plan will also include a model maintenance program. Any change to this work plan shall be approved by the Lead Oversight Agency with concurrence by EPA as stated in Section I.D. The model reconstruction work plan will be submitted in accordance with the schedule specified in Attachment 1.

The City will compile, to the extent available, the historical data listed in Section III.H.1 of this Statement of Work for the Model Domain. EPA and DTSC will assist the City to the extent possible in the collection of this data from various sources, which may include EPA and

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USGS.

From the compiled data the City shall develop a conceptual model consisting of the following primary components: stratigraphic analysis; pumpage, recharge and discharge analysis, boundary condition analysis, aquifer parameter analysis and water budget analysis. Based on the conceptual model the City will construct a numerical groundwater flow model to simulate groundwater flow conditions in the vicinity of and including the Newmark OU and Muscoy OU. The model will be constructed using the USGS numerical groundwater flow model MODFLOW, or an equivalent with approval and concurrence as stated in Section I.D of this Statement of Work. The model will be calibrated under transient conditions to historical water levels gathered during data compilation. Model verification will be performed using extraction well aquifer testing data. Sensitivity analysis shall be performed to assess model uncertainties. Upon completion and approval by EPA, the model shall be referred to as the "Reconstructed Newmark Groundwater Flow Model." Once the Reconstructed Newmark Groundwater Flow Model is completed, the City shall prepare a report summarizing the components of the model reconstruction effort. The report shall include a summary of data used to reconstruct the model, a summary of results of all model runs performed during model calibration, model verification, sensitivity analysis and model simulations, and interpretations made as a result of model runs using the Reconstructed Newmark Groundwater Flow Model. This report shall be made available for review by the major stakeholders during a comment period of at least 30 days before finalization as described in the approved work plan.

H. Maintenance of Groundwater Flow Model Requirements: The City will maintain and update the Reconstructed Newmark Groundwater Flow Model pursuant to the schedule

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provided in Section III.H.4 of this Statement of Work or as modified and approved by the Lead Oversight Agency. The City shall maintain the Reconstructed Newmark Groundwater Flow Model with groundwater data compilations, model calibration checks and model updates, according to the criteria and schedule developed during the City's Reconstructed Newmark Groundwater Flow Model reconstruction effort.

1. Data compilation: According to the schedule provided in Section III.H.4.a of this Statement of Work, new data will be compiled to support potential updates to the Reconstructed Newmark Groundwater Flow Model that will include the following:

a) Information, to the extent available to the City, using its best efforts, from new wells installed or brought on-line after the last data compilation period that are located within the model domain:

i) Well location

ii) Lithologic logs

iii) E-logs

iv) Construction details

v) Pump test results

vi) Sampling results

vii) Water level data

b) Information, to the extent available to the City, using its best efforts,

for all wells in the model domain, including:

i) Production by quarters

ii) Up-dated pump test results





# iii) Water level data

c) Other data, to the extent available to the City, using its best efforts, for the model domain including:

i) Volumes of artificial recharge by quarters

ii) Precipitation data

iii) Stream flow data

2. Modeling update: The City shall update the Reconstructed Newmark Groundwater Flow Model using the compiled data required in Section III.H.1, and pursuant to the schedule provided in Section III.H.4.b of this Statement of Work. Based on the compiled input data, calibration checks of the Reconstructed Newmark Groundwater Flow Model shall be performed to evaluate whether the model meets the calibration criteria established during the model reconstruction effort or subsequently revised with Lead Oversight Agency approval. If established calibration criteria are not met, the model shall be modified and recalibrated to meet the calibration criteria.

## 3. Reporting requirements:

a) The City shall submit reports of data compiled per Section III.H.1 according to the schedule that data compilation activities are completed. Data compilation reports shall include:

i) A listing of compiled data;

ii) Actual data records or a summary of data records; and

iii) Recommendations for performing an interim model update within the established baseline period for model updates, if deemed warranted by the City or

Lead Oversight Agency.

b) The City shall prepare reports summarizing Reconstructed Newmark Groundwater Flow Model update activities as those updates are performed. All model updates shall be made available for review by the major stakeholders during a comment period of at least 30 days prior to being finalized, and shall include the following information:

i) A description of the updates to the Reconstructed Newmark Groundwater Flow Model;

ii) Any new data added to the Reconstructed Newmark

Groundwater Flow Model;

iii) Results of all Reconstructed Newmark Groundwater Flow Model runs performed including failed or incomplete runs;

iv) Results of the calibration check and/or calibration efforts; and

v) Any interpretations made as a result of Reconstructed Newmark,

Groundwater Flow Model runs.

All model updates will include any new and recent data that were not included in the previous model update.

4. Schedule: The schedule for performing groundwater flow model maintenance and reporting activities is as follows:

a) Compilation of the data listed in Section III.H.1 and associated reporting activities as specified in Section III.H.3 will be performed on an annual basis for the first five years after the Reconstructed Newmark Groundwater Flow Model is finalized and approved in writing by EPA. The first annual data compilation period starts on the date of

approval in writing of the Reconstructed Newmark Groundwater Flow Model. After the first five years of model maintenance, the frequency of data compilation activities will be reevaluated. The City will evaluate the frequency of data compilation events and provide recommendations for modifications, if warranted, to the Lead Oversight Agency. The Lead Oversight Agency will review the City recommendations and, if deemed appropriate, will approve these modifications in accordance with Section I.D of this Statement of Work. Subsequent modifications to the frequency of data compilation events may be requested by the City following the same process.

b) Regularly scheduled model update activities shall initially be performed every five years, with the first five-year update period commencing on the date following Lead Oversight Agency approval of the Reconstructed Newmark Groundwater Flow Model in accordance with Section I.D of this Statement of Work. More frequent model updates (interim updates) may be required based on review of data periodically compiled for the model domain. If an interim model update is performed, the next regularly scheduled update will be performed five years after completion of the interim model update. After the first 15 years of model maintenance, the baseline period of five years for performing model update activities will be reevaluated. The City will evaluate the baseline period for performing model update activities and provide recommendations for modifications, if warranted, to the Lead Oversight Agency. The Lead Oversight Agency will review the City recommendations and approve the modifications if deemed appropriate. Subsequent modifications to the model update frequency may be requested by the City following the same process.

c) Data compilation reports will be submitted within 90 days of completion of the data compilation period. Model update reports for regularly scheduled model

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update events will be submitted within 90 days of the corresponding submission of the data compilation report ending the five-year model update period. Interim model update reports will be submitted within 90 days of completion of the model update event.

I. Institutional Control Requirements: The City shall submit any complete permit application package that involves new or redeveloped wells, artificial recharge or other groundwater management activities that may affect the Interim Remedies to EPA and DTSC once it is evaluated by the City. The complete permit application package shall include all documents submitted by the applicant, and the complete evaluation and proposed decision made by the City. In the event that the Reconstructed Newmark Groundwater Flow Model is run in connection with the City's evaluation of the permit application, the purpose of the runs should be detailed in the complete permit application submitted to EPA and DTSC, including all inputs and assumptions used by the applicant and by the City, if the City uses different values than the applicant in its evaluation of the application, and its decision. Any change to the model parameters by the applicant or the City, beyond adding the proposed artificial recharge and/or pumping being considered pursuant to the application, that would influence the structure of the Reconstructed Newmark Groundwater Flow Model (e.g. any recalibration, different boundary conditions, or different step sizes, etc.) shall undergo the same level of stakeholders' review as outlined in the work plan approved by the Lead Oversight Agency, and shall be fully described in the application and/or the evaluation and proposed decision by the City, as applicable. The complete application package, including the City's evaluation of the application, will be required for EPA and DTSC review and approval in accordance with the Consent Decree. The completed application and evaluation shall be submitted to EPA and DTSC for review within 90 days of

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receipt of the initial permit application unless the City, DTSC, and EPA agree to a longer period.

J. Suspension of Operations: The City may suspend operation of the affected Facilities only in accordance with the following conditions:

1. If the treated water does not meet or it is anticipated that it will not meet the requirements of the Water Supply Permit after or despite the implementation of required corrective steps specified in the permit, the City shall immediately shut down the affected Facilities, unless the Lead Oversight Agency and Department of Health Services (DHS) authorize otherwise. In the case of a shutdown, the City shall verbally inform the EPA and DTSC Project Coordinators within 24 hours of the shutdown, and shall submit written notification to EPA and DTSC within 7 days of the shutdown. The written notification shall describe the cause for the shutdown, list the primary and secondary drinking water standards or Water Supply Permit levels, if any, that were exceeded or could not be met, shall describe to the extent reasonably ascertainable the cause of any actual or anticipated deviations from these standards or permit levels, and shall outline any corrective actions beyond those specified in the Water Supply Permit necessary for the affected Facilities to meet the Performance Standards as defined in Section IV of the Consent Decree. The City shall not resume operation of the affected Facilities until directed by the Lead Oversight Agency with the concurrence of the Support Oversight Agency.

2. The City may suspend operations by designating a maintenance outage (e.g., a full day or a portion thereof). Maintenance outages during the operating year shall count toward and shall not exceed the Annual Maintenance Allowance expressed in gallons based on 35 full days annually of such maintenance or the City shall be considered in violation of the Consent Decree. Extraction well network outages due to Force Majeure conditions do not count against

the Annual Maintenance Allowance. Maintenance outages may not be designated for reasons other than maintenance. The City shall notify the Lead Oversight Agency and Support Oversight Agency Project Coordinators in advance of a planned maintenance outage, and within 24 hours of any unplanned maintenance outage. Maintenance outages shall be specifically accounted for in the Progress Reports required in Section II.B.2. of this Statement of Work.

K. Non-Routine O & M: "Non-Routine O&M," as used in this Paragraph, shall include unplanned operations or O&M events that require the City to operate the Newmark and/or Muscoy extraction and treatment systems at capacities that exceed the Maximum Routine Extraction Rates established by this Statement of Work.

## 1. Process for Reporting Non-Routine O&M:

a) At the outset of an event that the City believes requires Non-Routine O&M, the City shall notify the Lead and Support Oversight Agencies of the event, initiate Transition Phase activities defined in this Statement of Work, and submit a scenario specific mitigation plan within six months of the onset of the event

b) The Lead Oversight Agency, with the Support Oversight Agency's concurrence, shall review and approve the mitigation plan in accordance with Section XI of the Consent Decree .

c) Not withstanding paragraphs a) and b) above, EPA and DTSC shall proceed in accordance with Section VI, Paragraph 17 of the Consent Decree (Modification of the Statement of Work), when requiring Non-Routine O&M to be performed beyond what is already provided for in the mitigation plan proposed by the City. The deadline for completion of the Non-Routine O&M may also be extended by the Lead Oversight Agency, with concurrence from

the Support Oversight Agency.

2. Potential Non-Routine O&M: Non-Routine O&M may be required when additional extraction, treatment or monitoring capacity is required to achieve and/or maintain the Performance Standards as defined in Section IV of the Consent Decree and in this Statement of Work. The Lead Oversight Agency shall determine the necessary response to situations that give rise to the need for Non-Routine O&M of this kind. In the event that the Lead Oversight Agency determines that such additional capacity is required beyond that provided for by this Statement of Work, the Lead Oversight Agency may proceed to modify this Statement of Work to require such Work in accordance with Section VI, Paragraph 17.c of the Consent Decree, or proceed otherwise in accordance with the Consent Decree. The City shall implement such responses in accordance with the requirements of the Consent Decree and this Statement of Work, and pursuant to a schedule approved by the Lead Oversight Agency. Following are non-exclusive examples of events that EPA anticipates may require Non-Routine O&M and the type of Non-Routine O&M that may be required in such events:

a) If monitoring well sampling results show a departure from contaminant performance criteria per the provisions set forth in Section III.F.1.a of this Statement of Work, installation of monitoring wells may be required by the Lead Oversight Agency up to the limitations stated in Section III.K.3.a of this Statement of Work and Section VI, Paragraph 17.c of the Consent Decree. It is anticipated that these wells would be installed between the existing monitoring well network and the extraction wells, both in the vertical and horizontal plane, to further evaluate containment and determine if there is a down gradient source.

b) If inhibition criteria (as defined in Section III.F.2) cannot be sustained

for a 180 day period, installation of monitoring well locations up to the limitations stated in Section III.K.3.a of this Statement of Work and Section VI, Paragraph 17.c of the Consent Decree may be required by the Lead Oversight Agency to more accurately delineate the inward gradient.

c) If additional pumping is determined by the Lead Oversight Agency to be necessary to achieve and/or maintain the Performance Standards as defined in Section IV of the Consent Decree, the City shall utilize the Reconstructed Newmark Groundwater Flow Model and its best professional judgment in consultation with the Lead Oversight Agency and the Support Oversight Agency to determine how much additional pumping is needed.

## 3. Limitations of Non-Routine O&M:

The City may be required to operate the Newmark Plume Front extraction well network and/or Muscoy Plume extraction well network above the set Maximum Routine Extraction Rates at what are termed Non-Routine Extraction Rates, and/or install and sample additional monitoring well clusters. All Non-Routine O&M activities shall be restricted to the set monetary limits specified in Section VI, Paragraph 17.c of the Consent Decree and the provisions specified as follows:

a) The aggregate cost for the Newmark Plume Front extraction well network and the Muscoy Plume Front extraction well network Non-Routine O&M shall be subject to the monetary limits specified in Section VI, Paragraph 17.c of the Consent Decree over the defined operational period for the Interim Remedy as set forth in Section VI, Paragraph 14 of the Consent Decree.

b) As provided in Paragraph 17.d of the Consent Decree, the City shall

use its best efforts to procure insurance at commercially reasonable rates to cover the costs of Non-Routine O&M. Provided, however, that the City may determine, subject to the concurrence of the Lead and Support Oversight Agencies, that such insurance is unavailable at commercially reasonable rates, not cost-effective, or that such insurance is otherwise inappropriate.

In order to make the determinations as to whether such insurance is available at commercially reasonable rates, cost-effective, and appropriate, the City shall, no later than one year before the expiration of any applicable insurance paid for from the Escrow, or after three years of O&M if no insurance is procured at the outset of this Work (and every three years thereafter if no insurance is procured at the previous three-year interval), seek the assistance of a qualified insurance broker to assist the City in assessing the applicable insurance market so that the City can determine whether such insurance is:

- available at commercially reasonable rates to cover the costs of Non-Routine O&M;
- cost-effective; and

• appropriate,

in light of the remaining time of performance, available funds, and claims experience, among other relevant factors. Provided, however, that if the City is approached by a qualified insurance industry representative during any such three-year interval, the City shall consider in good faith any reasonable proposal to provide such insurance.

Before soliciting bids, the City shall, to the extent practical, establish objective criteria to identify responsible and responsive providers of such insurance coverage. In the event that such insurance coverage is available at commercially reasonable rates, otherwise feasible, costeffective, and appropriate for the Non-Routine O&M, the City shall select appropriate insurance

packages and coverage that provide the most cost-effective or otherwise appropriate coverage, taking into account claims experience and expertise in such environmental matters, as well as the financial stability and capacity of the insurer. The City also may elect to purchase additional<sup>17</sup> coverage to cover other potential liabilities that may arise in connection with the performance of the Work.

In the event the City purchases Non-Routine O&M or other insurance related to the Work with the concurrence of the Lead and Support Oversight Agencies, the premiums shall be payable from the O&M Escrow, to the extent funding is available. The City shall not be bound to purchase such insurance if funding is unavailable from the O&M Escrow.

c) Under no circumstances shall the City be required to operate at Non-Routine Extraction Rates that cause it to violate the terms of the City's DHS Permit to Operate.

d) Accrual towards the monetary limits specified in Section VI, Paragraph 17.c of the Consent Decree, shall include all extraction, treatment, conveyance, distribution and monitoring costs that are associated with extracting water at rates above the Maximum Routine Extraction Rates, as detailed in Section III.K.3.h of this Statement of Work, beyond the City's ordinary costs for operating the remedy and producing water under the normal operating conditions.

e) Non-Routine Extraction Rates shall be reduced to the extent necessary to avoid pumping at rates that are deemed unsustainable due to aquifer conditions for the extraction wells within the Newmark and Muscoy Plume Extraction Well networks. As under routine O&M, if the City proposes to reduce the pumping rate to below the Non-Routine Extraction Rates, the City shall notify the Lead Oversight Agency and obtain approval prior to

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lowering the flow rates, unless otherwise provided in the approved Mitigation Plan.

f) Under Non-Routine O&M conditions, the City shall only be required to extract groundwater at rates within the capacity of the City and/or State treatment systems or other treatment system facilities installed in the future during Non-Routine O&M operations or to increase the City's water supply capacity. Additional treatment capacity may be added per the terms and schedule detailed in an approved mitigation plan within the financial limits established in Section III.K.3.a of this Statement of Work.

g) When operating at Non-Routine Extraction Rates, the following additional cost components shall be counted towards the financial limits established in Section VI, Paragraph 17 of the Consent Decree:

i) Additional capital and monitoring costs associated with increasing the capacity of existing extraction wells or monitoring wells, or installing new ones, and increasing treatment capacity, conveyance capacity, and distribution capacity, when required under an approved mitigation plan.

ii) Increased Pumping Elevation Costs and Excessive Pipeline Headloss Costs - The City will demonstrate in the mitigation plan through a cost benefit analysis the most cost effective way to evaluate the above costs. In the case that water needs to be moved to a higher elevation, increased pumping elevation costs and excessive pipeline headloss costs as defined below are covered in the financial limits established above. Increased Pumping Elevation Costs are the energy costs for moving the increment of water extracted above the Maximum Routine Extraction Rate to higher elevation portions of the City for distribution, when necessary. The Excessive Pipeline Head Loss Costs are the incremental energy costs to convey

water through the raw water pipeline to the treatment plants at the increased head loss values over the head losses encountered while operating at Maximum Routine Extraction Rates. The methodology for evaluating these costs will be established in the Operational Sampling and Analysis Plan, subject to EPA review and approval.

iii) Water Production Cost Not Covered By a Sale. In the case when the increment of water produced above the Maximum Routine Extraction Rate cannot be used by the City and is therefore sold to another water agency at a loss, the difference between the sale price and the City's current nominal cost to produce that increment of water will be applied against the financial limits specified in Section VI, Paragraph 17.c of the Consent Decree. If the City subsequently recoups such loss, the City shall reimburse the applicable financial account. In the case when the increment of water produced over the Maximum Routine Extraction Rate can not be sold and is discharged to a river or stream for a beneficial use that is not reimbursable, the City's current nominal cost to produce that increment of water will be applied against the financial limits specified in Section VI, Paragraph 17.c of the Consent Decree.

iv) Replacement of Water Exported Out of the Basin. A condition may occur in which the City and neighboring water agencies within the San Bernardino Basin Area ("Basin") have insufficient demand to utilize all of the water extracted under Non-Routine O&M conditions. Therefore, the only alternative may be to export excess water out of the Basin to other municipalities or export excess water out of the Basin through a river or stream for potential beneficial use outside the Basin. If export of water out of the Basin is unavoidable during Non-Routine O&M operations, the City shall comply with the terms of the Western

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Judgment. If water is required to be imported to satisfy the Western Judgment, the cost of the replacement water will be applied against the financial limits specified in Section VI, Paragraph 17.c of the Consent Decree. The costs will be based on the actual rates paid by the City at the time of the purchase of the replacement water.

h) If financial limits for Non-Routine O&M as specified in Section VI, Paragraph 17.c of the Consent Decree have been reached, the City is not required by this Statement of Work to operate above the Maximum Routine Extraction Rates or to make additional capital expenditures related to Non-Routine O&M pursuant to Section VI, Paragraph 17 of the Consent Decree or Section III.K of the Statement of Work.

# 4. Implementation of Non-Routine O&M

a) The City shall prepare a Baseline Mitigation Plan for Non-Routine O&M according to Section II.B.8 of this Statement of Work.

b) For each Non-Routine O&M event, the City shall adapt the Baseline Mitigation Plan to the specific conditions of that event, and develop a scenario-specific Mitigation Plan. This scenario-specific plan will take into account all existing conditions at the time, and propose a solution that is supported by a Cost Benefit Analysis, considering all existing conditions. The proposed solution shall include all relevant operating conditions, and the projected length and estimated cost of the Non-Routine O&M operation. Preparation of the scenario-specific Mitigation Plan should begin at the onset of the Transition Phase, and be submitted to the Lead Oversight Agency for review within six months of the onset of the event. Implementation of the scenario-specific Mitigation Plan shall begin immediately upon approval of the Lead Oversight Agency.





Due Date or Date Completed

# ATTACHMENT 1 San Bernardino Municipal Water Department Schedule

**JCANNED** 

# **OPERATION AND MAINTENANCE**

A.Submit Staffing Plan90 days\*

**B.** Submit Time Line and Schedule 90 days\*

\* After consent decree is entered.

# DELIVERABLES

Funds expended by the City to prepare deliverables in advance of the Consent Decree will be refunded to the City through the escrow account once the Consent Decree is entered.

QA/QC Plan	180 days from receipt of existing final EPA QA/QC document or 90 days after the CD is entered, whichever is earlier		
Operational Sampling and Analysis Plan	180 days from receipt of existing final EPA QA/QC document or 90 days after the CD is entered, whichever is later		
Health and Safety Plan	180 days from receipt of existing final HSP document or 90 days after the CD is entered, whichever is earlier		
Baseline Mitigation Plan	180 days after the CD is entered for Newmark; Addendum180 days after Muscoy is declared operational and functional		
O&M Plans	Newmark OU: 180 days from receipt of final EPA O&M Manual or 90 days after the CD is entered, whichever is later Muscoy OU: 180 days from receipt of final EPA O&M Manual or 90 days after the Muscoy Plume Front extraction well network becomes operational and functional, whichever is later		

Groundwater Flow Model Reconstruction	90 days after the CD is entered	
Water Level Data	Quarterly report, 30 days after the end of the sampling event	
Plant/extraction well flows	Monthly report, 30 days after the end of the sampling event	
Site wide monitoring data	Semi annually, 30 days after the receipt of validated laboratory data	
Groundwater flow modeling reports	Data compilation report: Annual, 90 days after the end of the data compilation period. Such data compilation efforts in support of reconstructing the model may commence after October 1, 2002. Model Update Reports: Every five years, 90 days after the last data compilation report of the five-year period or interim period.	
Notification of system upset/failure	Immediately. Within the same working day or 3 calendar days of upset or failure at the latest, whichever is shorter.	
O&M Progress Reports	Monthly for the first two years after the CD is entered, 45 days after the end of the month Quarterly for the following 5 years, 45 days after the end of the quarter. Semi-Annually thereafter; 45 days after the end of the semi-annual period. Annually upon Lead Oversight approval; 45 days after the end of the semi-annual period.	
Five-year Review Report	Every five years, from OU operational and functional date to be established by the EPA.	

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# **ATTACHMENT 2**

# Design Specifications for Extraction/Treatment Systems and Extraction Rate Requirements

	Newmark (	Muscoy Plume Extraction Rates (gpm)			
Extraction Wells/Extraction Terminology	North Plant Extraction Newmark Plume Front I Wells			Extraction Wells	
	North Plant Treatment Facilities	Waterman Treatment Plant <sup>(2)</sup>	17th Street Treatment Plant	19 <sup>th</sup> Street Treatment Plant	
EW -1		1,700			
EW -2		1,700			
EW -3			2,000		
EW -4		1,700			
EW -5		1,700			
EW -6	1,000				
EW -7	1,300				
Newmark -3	1,600				
EW -108				1,300	
EW -109				1,300	
EW -110				2,500	
EW -111				2,500	
EW -112				1,300	
		6,800	2,000		
Total Extraction Rates	3,900	8,800		8,900	
		17,700		<b>1</b>	
		3.231E+09	9.504E+08	A 220E±00	
otal Extraction Rates With	1.853E+09	4.182E+09		4.229E+09	
laintenance Allowance (gpy ssuming 330 days of operation)		8.411E+09			
	1.026E+10				

Design Extraction Rate (gpm)	3,900	00 8,800		8,900	
Design Extraction Rates With Maintenance Allowance (gpy assuming 330 days of operation)	1.853E+09	4.182E+09		4.229E+09	
Target Extraction Rate	variable	varia	able	variable	
Maximum Routine Extraction Rate	NA	10,008		10,008	
Maximum Routine Extraction Rates With Maintenance Allowance (gpy assuming 330 days of operation)	NA	4.756E+09		4.756E+09	
Non-Routine Extraction Rates (gpm)	NA	>10,008		>10,008	
Non-Routine Extraction Rates With Maintenance Allowance (gpy assuming 330 days of operation)	NA	NA >4.756E+09		>4.756E+09'	
	reatment Plant I	Design Specifica	tions		
<u> </u>	Newmark OU Treatment Facilities (gpm)			Muscoy OU Treatment Facilities (gpm)	
Component	North Plant Treatment				
	Facilities	Waterman Treatment Plant <sup>(2)</sup>	17th Street Treatment Plant	19 <sup>th</sup> Street Treatment Plant	
ize of GAC Vessels (lbs of carbon)	20,000	20,000	20,000	30,000	
umber of Pairs	7	8 3		12	

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LPGAC Design Flow Rate Per Pair <sup>(3)</sup> (gpm)	696	637	650	972
Total Design Plant Flow Rate (gpm)	4,872	5,096	1,950	11,664
Maximum Flow Per Vessel	750	750	750	1,050
Maximum Flow Per Plant	5,250	6,000	2,250	12,600
Effective Capacity Per Vessel (96% of maximum in gpm)	720	720	720	1,008
	5.040	5,760	2,160	12.006
Effective Capacity (96% of maximum n gpm)	5,040	7,920		12,096
Effective Capacity (96% of maximum in gpy)	25,056			
	0.0057.00	2.737E+09	1.026E+09	5 7480 100
	2.395E+09	3.764E+09		5.748E+09
or //	1.191E+10			
Percent Additional Effective Capacity	29% 13%			
Over Design Extraction Rate	16%			

SCANNED

Notes:

LPGAC = Liquid phase granular activated carbon

Units = Gallons Per Minute (gpm) or Gallons Per Year assuming 330 days (gpy)

(1) - Extraction well design specification flow rates are based on the Newmark Groundwater Model prepared by EPA

(2) - A portion of the water extracted from EW-1, EW-2, EW-4 and EW-5 will be conveyed to the 19th Street Plant to remain within effective plant capacities at Design Extraction Rates

(3) - Based on design rates presented in the 100% Design Report for each treatment facility

NA - Not applicable

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# Facility Tele - TREATMENT CAPEAL COSTS

# **New Treatment Plants and Transmission Lines**

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5 10	Acacia Raw Water Acacia Treated Water	24" DIP from Mt. View and 11th across to 11th and Acacia 2630' X \$111/ft 24" DIP from 11th and Acacia down to 10th & "H" Street 2430' X \$111/ft
		to 10th & "H" Street 2430' X \$111/ft
0 10	27th Raw Water	16" DIP from 23rd and E up to 27th and Acacia 1900' X \$96/ft
<u> </u>		1900 × \$90/1
) 20	2000' Raw Waterline	2000' X \$111/ft
) 20	2000' Raw Waterline	2000' X \$111/ft
20	2000' Raw Waterline	2000' X \$111/ft
	0 20 0 20	20         2000' Raw Waterline           0         20         2000' Raw Waterline

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# **RECORDING REQUESTED BY AND WHEN RECORDED MAIL TO:**

Marie Rongone, Esq. Assistant Regional Counsel Office of the Regional Counsel United States Environmental Protection Agency Region 9, ORC-3 75 Hawthome Street San Francisco, CA 94105-3901

Space Above This Line For Recorder's Use Only

#### **DEED OF EASEMENT**

THE CITY OF SAN BERNARDINO, a municipal corporation, ("Grantor") hereby GRANTS to the the STATE OF CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL ("DTSC"), a government agency, (referred to as "Grantee"), an easement on properties located in the City of San Bernardino, County of San Bernardino, State of California, which are listed on the attached Exhibit "1", for which full legal descriptions are attached hereto as Exhibits "\_\_\_" through "\_\_\_" (the "properties"), all of which are made a part hereof and are incorporated herein by this reference.

This easement is temporary, runs with the land, and is granted for the sole purpose of providing Grantee with the right of ingress and egress, at all reasonable times, to the properties for the purpose of conducting activities relating to reducing and inhibiting the spread of groundwater contamination within the City of San Bernardino (the "work"), and assuring compliance with the Consent Decree dated \_\_\_\_\_\_, ("Consent Decree") executed in connection with the resolution of United States District Court, Central District, Civil Action Nos. CV 96-8867(MRP) and CV 96-5205(MRP), and is incorporated herein by this reference.

This easement becomes effective upon recordation of this document, and terminates upon the earlier of the completion of the remedial work specified in the Consent Decree or January 1, 2053, whichever first occurs. Upon the termination date DTSC, or its successor in interest, and as a condition of recordation of this document, shall execute all appropriate documents in recordable form necessary to terminate any interest of record created by this document, and to clear title of any encumbrance caused by the recordation of this document.

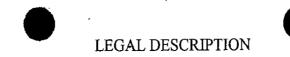
This easement is in gross and is personal to the Grantee. This easement is non-exclusive, and Grantor retains the right to make any use of the property, including the right to grant concurrent easements to third parties, that does not interfere unreasonably with Grantee's use of the easement. This easement may not be assigned without the prior written consent of the Grantor. This easement will continue only as long as it is used for the purposes described above, and will terminate as soon as the Grantor has received written notice that the work has been completed or otherwise as set forth in the Consent Decree.

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Executed on,	2004.	GRANTOR THE CITY OF SAN BERNARDINO	
		Ву:	
		Its:	
STATE OF	)		
COUNTY OF	)		

On \_\_\_\_\_\_, 2004, before me, the undersigned, a Notary Public in and for said County and State, personally appeared \_\_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Notary Public



The East 137 feet of the North 80 feet of the North 163 feet of the West 279.5 feet of Lot 2, Block 75 of the NINE ACRE SURVEY OF THE RANCHO SAN BERNARDINO, as per plat thereof recorded in Book 7 of Maps, page 2, in the office of the County Recorder of said County, lying West of Stoddard Street (Stoddard Avenue) as conveyed to the City of San Bernardino by Deed recorded October 22, 1909, in Book 445 of Deeds, page 1.

APN 140-051-42



LEGAL DESCRIPTION

ALL THAT PORTION OF LOT 4, BLOCK 75, NINE ACRE SURVEY OF THE RANCHO SAN BERNARDINO, IN THE CITY OF SAN BERNARDINO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 7, PAGE(S) 2 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING 30.00 FEET NORTH AND 137.50 FEET WEST OF THE SOUTHEAST CORNER OF SAID LOT 4, SAID POINT BEING ON THE NORTH RIGHT-OF-WAY LINE OF ELEVENTH STREET BEING 60 FEET WIDE;

THENCE WEST 46.50 FEET, ALONG THE NORTH RIGHT-OF-WAY LINE OF ELEVENTH STREET, TO THE EAST LINE OF PROPERTY CONVEYED TO ELIZABETH HOOPER SWANSON, BY DEED RECORDED JANUARY 20, 1920 AND RECORDED IN BOOK 668, PAGE(S) 270, OF DEEDS;

THENCE NORTH 137.50 FEET;

THENCE EAST 46.50 FEET;

THENCE SOUTH 39.50 FEET;

THENCE EAST 7.00 FEET;

THENCE SOUTH 98.00 FEET, MORE OR LESS, TO THE NORTH RIGHT-OF-WAY LINE OF ELEVENTH STREET;

THENCE WEST 7.00 FEET, MORE OR LESS, TO THE POINT OF BEGINNING;

CONTAINING APPROXIMATELY 7,080 SQUARE FEET OR 0.16 ACRES.

APN 140-064-24





SCANNED

THE REAL PROPERTY IN THE CITY OF SAN BERNARDINO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, DESCRIBED AS LOT 34, NEFF, HAM AND NEFF SUBDIVISION, IN THE CITY OF SAN BERNARDINO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 16, PAGE 25 OF MAPS, RECORDS OF SAID COUNTY.

APN 140-072-12



THE NORTH 58.00 FEET OF LOT 1, BLOCK 3, HART AND MARSHALL SUBDIVISION, IN THE CITY OF SAN BERNARDINO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 7 OF MAPS, PAGE 48, RECORDS OF SAID COUNTY.

APN 140-103-22



THE LAND REFERRED TO HEREIN IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF SAN BERNARDINO, AND IS DESCRIBED AS FOLLOWS:

LOT(S) 2, BLOCK M, BUNGALOW ADDITION NO. 2, AS SHOWN BY MAP ON FILE IN BOOK 17 PAGE(S) 6, OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA.

TOGETHER WITH THE NORTH HALF OF THAT CERTAIN ALLEY ADJOINING SAID LAND ON THE SOUTH AS SAID ALLEY WAS VACATED BY RESOLUTION NO. 8256 OF THE MAYOR AND COMMON COUNCIL OF THE CITY OF SAN BERNARDINO, A CERTIFIED COPY OF WHICH WAS RECORDED JULY 25, 1966 IN BOOK 6668 PAGE 256 OF OFFICIAL RECORDS.

APN 140-111-19



THAT PORTION OF THE WEST ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF SECTION 16, TOWNSHIP 1 NORTH, RANGE 4 WEST, SAN BERNARDINO BASE & MERIDIAN, IN THE RANCHO MUSCUPIABE, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, DESCRIBED AS FOLLOWS:  $\langle \cdot \rangle_{i}$ 

BEGINNING AT THE POINT OF INTERSECTION OF THE WEST LINE OF SAID SECTION 16 WITH THE NORTHERLY LINE OF KENDALL DRIVE, 80 FEET WIDE; THENCE NORTH 00°22'00" WEST ALONG SAID WEST LINE 100.00 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 89°38'00" EAST 126.89 FEET TO A POINT WHICH IS 150.00 FEET NORTHEASTERLY AND MEASURED AT RIGHT ANGLES FROM THE NORTHERLY LINE OF SAID KENDALL DRIVE; THENCE NORTH 60°24'40" WEST PARALLEL TO SAID KENDALL DRIVE 146.45 FEET TO A POINT ON SAID SECTION LINE; THENCE SOUTH 00°22'00" WEST ALONG SAID SECTION LINE 73.13 FEET TO THE TRUE POINT OF BEGINNING.

APN 151-221-18

#### EASEMENT

THAT PORTION OF THE WEST ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF SECTION 16, TOWNSHIP 1 NORTH, RANGE 4 WEST, SAN BERNARDINO BASE & MERIDIAN, IN THE RANCHO MUSCUPIABE, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, DESCRIBED AS FOLLOWS:

BEGINNING AT THE POINT OF INTERSECTION OF THE WEST LINE OF SAID SECTION 16 WITH THE NORTHERLY LINE OF KENDALL DRIVE, 80 FEET WIDE; THENCE NORTH 00°22'00" WEST ALONG SAID WEST LINE 173.13 FEET TO THE TRUE POINT OF BEGINNING; THENCE NORTH 60°24'40" WEST 46.17 FEET TO THE EAST LINE OF WESTERN AVENUE, 40.00 FEET WIDE; THENCE SOUTH 00°22'00" EAST 23.08 FEET ALONG SAID EAST LINE; THENCE SOUTH 60°24'40" EAST 46.17 FEET; THENCE NORTH 00°22'00" WEST 23.08 FEET TO THE TRUE POINT OF BEGINNING.

APN 266-131-17 (Portion)

N S657-000\Legal Descriptions

## PARCEL A:

THAT PORTION OF THE WEST ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF SECTION 16, TOWNSHIP 1 NORTH, RANGE 4 WEST, SAN BERNARDINO BASE & MERIDIAN, IN THE RANCHO MUSCUPIABE, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE WEST LINE OF SAID SECTION 16, SAID POINT BEING NORTH 00°22'00" WEST 762.00 FEET FROM THE INTERSECTION OF SAID LINE WITH THE NORTHERLY LINE OF KENDALL DRIVE, 80 FEET WIDE; THENCE N89°39'34" EAST 60.00 FEET; THENCE NORTH 00°22'00" WEST 60.00 FEET; THENCE SOUTH 89°39'34" WEST 60.00 FEET TO THE WEST LINE OF SAID SECTION 16; THENCE SOUTH 00°22'00" EAST ALONG SAID LINE 60.00 FEET TO THE POINT OF BEGINNING.

PARCEL B:

AN EASEMENT FOR THE BENEFIT OF THE GRANTEE HEREIN, THEIR SUCCESSORS AND ASSIGNS, FOR THE PURPOSES OF INGRESS, EGRESS AND PIPELINES OVER AND ACROSS THE FOLLOWING DESCRIBED PROPERTY:

THAT PORTION OF THE WEST ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF SECTION 16, TOWNSHIP 1 NORTH, RANGE 4 WEST, SAN BERNARDINO BASE & MERIDIAN, IN THE RANCHO MUSCUPIABE, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, DESCRIBED AS FOLLOWS:

THE WESTERLY 20.00 FEET OF THE NORTHERLY 490.35 FEET; EXCEPTING THEREFROM THE NORTHERLY 30.00 FEET LYING WITHIN 42<sup>ND</sup> STREET.

APN 151-221-14 APN 151-221-15 (Portion) (Easement)

PARCEL 3:

LOT 133, OF TRACT NO. 1748, ARROWHEAD SUBURBAN FARMS, TRACT "E", IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 25 OF MAPS, PAGE 59, RECORDS OF SAID COUNTY.

APN 151-231-03

SCANNED



PARCEL 3:

LOT 134, OF TRACT NO. 1748, ARROWHEAD SUBURBAN FARMS, TRACT "E", IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 25 OF MAPS, PAGE 59, RECORDS OF SAID COUNTY.

APN 151-231-04

SCANNED



## PARCEL 3:

LOT 135, OF TRACT NO. 1748, ARROWHEAD SUBURBAN FARMS, TRACT "E", IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 25 OF MAPS, PAGE 59, RECORDS OF SAID COUNTY.

APN 0151-231-05



## PARCEL 3:

LOT 126, OF TRACT NO. 1748, ARROWHEAD SUBURBAN FARMS, TRACT "E", IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 25 OF MAPS, PAGE 59, RECORDS OF SAID COUNTY.

APN 0151-231-06



## PARCEL 3:

LOT 127, OF TRACT NO. 1748, ARROWHEAD SUBURBAN FARMS, TRACT "E", IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 25 OF MAPS, PAGE 59, RECORDS OF SAID COUNTY.

APN 151-231-07





LOT "A" OF TRACT NO. 1748, ARROWHEAD SUBURBAN FARMS, TRACT "E", IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 25 OF MAPS, PAGE 59, RECORDS OF SAID COUNTY.

APN 151-231-08





PARCEL 3:

LOT 130, OF TRACT NO. 1748, ARROWHEAD SUBURBAN FARMS, TRACT "E", IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 25 OF MAPS, PAGE 59, RECORDS OF SAID COUNTY.

APN 151-231-11

N \$657-000\Legal Descriptions



LOT 11, BLOCK 3, TRACT #1809, GARDEN ESTATES UNIT #2, AS PER PLAT RECORDED IN BOOK 26 OF MAPS, PAGE 22, RECORDS OF SAID COUNTY.

APN 153-131-22

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# LOT 12, BLOCK 3, TRACT #1809, GARDEN ESTATES UNIT #2, AS PER PLAT RECORDED IN BOOK 26 OF MAPS, PAGE 22, RECORDS OF SAID COUNTY.

APN 153-131-23



ALL THAT PORTION OF THE EAST ½ OF LOT 5, BLOCK 36, RANCHO SAN BERNARDINO, IN THE CITY OF SAN BERNARDINO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 7 OF MAPS, PAGE 2, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT IN THE EAST LINE OF SAID LOT 30 FEET NORTH OF THE SOUTHEAST CORNER THEREOF; THENCE NORTH ALONG THE EAST LINE OF SAID LOT, 68.54 FEET, MORE OR LESS, TO A POINT OF 250 FEET SOUTH OF THE NORTHEAST CORNER OF SAID LOT; THENCE WEST AND PARALLAL WITH THE NORTH LINE OF SAID LOT, 150 FEET; THENCE SOUTH 67.53 FEET, MORE OR LESS, TO A POINT 30 FEET NORTH OF THE SOUTH LINE OF SAID LOT, SAID POINT BEING IN THE NORTH LINE OF THIRTEENTH STREET; THENCE EAST ALONG THE NORTH LINE OF THIRTEENTH STREET 150 FEET TO THE POINT OF BEGINNING.

APN 145-193-13



LOT 19, BLOCK A, CENTRAL HOME TRACT, IN THE CITY OF SAN BERNARDINO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 25 OF MAPS, PAGE 4, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN 144-221-28





A PORTION OF LOT 5, BLOCK 53 OF RANCHO SAN BERNARDINO, IN THE CITY OF SAN BERNARDINO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 7 OF MAPS, PAGE(S) 2, RECORDS OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF THAT CERTAIN PROPERTY CONVEYED TO ROSARIO M. AND LOUISA D. SERMENO, HUSBAND AND WIFE, RECORDED IN BOOK 6454, PAGE 162, OFFICIAL RECORDS; THENCE NORTHERLY ALONG THE EAST LINE OF GARNER STREET, FORMERLY ST. ELMO STREET, 87.75 FEET; THENCE EAST 181.00 FEET; THENCE SOUTH 54.25 FEET; THENCE WEST 11.00 FEET; THENCE SOUTH 33.50 FEET; THENCE WEST 170.00 FEET ALONG THE NORTH LINE OF SAID SERMENO PROPERTY TO THE POINT OF BEGINNING.

APN 144-201-50





LOT 20 OF TRACT 3538, IN THE CITY OF SAN BERNARDINO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA AS PER PLAT RECORDED IN BOOK 46 OF MAPS, PAGE 56, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

LEGAL DESCRIPTION

APN 143-132-20





LOT 1, BLOCK "I", HOME GARDENS SUBDIVISION, AS PER PLAT RECORDED IN BOOK 21 OF MAPS, PAGE 53, RECORDS OF SAID COUNTY.

LEGAL DESCRIPTION

APN 146-104-10



LOT 2, BLOCK "I", HOME GARDENS SUBDIVISION, AS PER PLAT RECORDED IN BOOK 21 OF MAPS, PAGE 53, RECORDS OF SAID COUNTY.

APN 146-104-11

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## PARCEL NO. 1:

THAT PORTION OF LOT 8, BLOCK 58 OF RANCHO SAN BERNARDINO, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 7 OF MAPS, PAGE(S) 2, RECORDS OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING 175 FEET WEST OF THE NORTHEAST CORNER OF LOT 8, BLOCK 58; THENCE WEST 75 FEET TO THE NORTHEAST CORNER OF LAND CONVEYED TO VICTOR E. GAMBER AND WIFE AND RECORDED DECEMBER 26, 1925, IN BOOK 21, PAGE 400, OFFICIAL RECORDS; THENCE SOUTH 285 FEET; THENCE WEST 130 FEET TO THE NORTHEAST CORNER OF TRACT OF LAND CONVEYED TO EARL E. PRESTON BY DEED RECORDED IN BOOK 608, PAGE 37, OF DEEDS; THENCE SOUTH 108 FEET; THENCE EAST 205 FEET; THENCE NORTH 393 FEET TO THE NORTH LINE OF SAID LOT 8, BEING THE POINT OF BEGINNING.

#### PARCEL 2:

THAT PORTION OF LOT 8, BLOCK 58 OF RANCHO SAN BERNARDINO, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 7 OF MAPS, PAGE(S) 2, RECORDS OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 8; THENCE SOUTH ALONG THE EAST LINE OF SAID LOT; 803 FEET TO A POINT DISTANT THEREON 528 FEET NORTH OF THE SOUTHEAST CORNER OF SAID LOT; THENCE WEST 380 FEET; THENCE NORTH TO THE NORTH LINE OF SAID LOT; THENCE EAST ALONG THE NORTH LINE OF SAID LOT TO THE POINT OF BEGINNING.

EXCEPT THEREFROM THE WEST 205 FEET OF THE NORTH 393 FEET THEREOF.

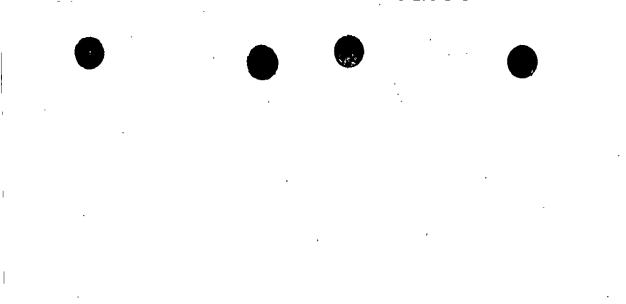
APN 269-081-06 APN 269-081-07 APN 269-081-08



LOT 14 AND THE WEST 6.5 FEET OF LOT 13, TRACT 1711, NORTON'S LITTLE FARMS, AS PER PLAT RECORDED IN BOOK 25 OF MAPS, PAGE 27, RECORDS OF SAID COUNTY.

APN 413-284-07

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# AMERICAN INTERNATIONAL SPECIALTY LINES INSURANCE COMPANY

SAN BERNARDINO P

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MANY OF THE COVERAGES CONTAIN CLAIMS-MADE-AND-REPORTED REQUIREMENTS. PLEASE READ CAREFULLY, ADDITIONALLY, THIS POLICY HAS CERTAIN PROVISIONS AND REQUIREMENTS UNIQUE TO IT AND MAY BE DIFFERENT FROM OTHER POLICIES THE INSURED MAY HAVE PURCHASED. DEFINED TERMS, OTHER THAN HEADINGS, APPEAR IN BOLD FACE TYPE.

# NOTICE: THE DESCRIPTIONS IN ANY HEADINGS OR SUB-HEADINGS OF THIS POLICY ARE INSERTED SOLELY FOR CONVENIENCE AND DO NOT CONSTITUTE ANY PART OF THE TERMS OR CONDITIONS HEREOF.

In consideration of the payment of the premium, in reliance upon the statements in the Declarations and the Application annexed hereto and made a part hereof, and pursuant to all of the terms of this Policy, the Company agrees with the **Named Insured** as follows:

#### I. INSURING AGREEMENTS

## A. COVERAGES

## **COVERAGE A - LEGAL LIABILITY FOR POLLUTION CONDITIONS**

To pay on behalf of the **Insured**, **Loss** that the **Insured** is legally obligated to pay as a result of **Claims** for **Bodily Injury**, **Property Damage** or **Clean-Up Costs** resulting from **Pollution Conditions** on, under or migrating from **Insured Site**, or **Pollution Conditions** resulting from **Treatment Waste Transportation**, provided such **Claims** are first made against the **Insured** and reported to the Company, in writing, during the **Policy Period** or during the Extended Reporting Period if applicable, and in accordance with Section *Ill*. of the Policy.

#### COVERAGE B - CONSENT DECREE REQUIRED CLEAN-UP

To pay to or on behalf of the **Insured Clean-Up Costs** incurred pursuant to and necessary to satisfy the requirements of the **Consent Decree**, provided that:

- 1. Clean-Up takes place after the Inception Date and before the Termination Date; and
- 2. The **Insured** timely and routinely reports the **Clean-Up Costs** to the Company prior to the **Termination Date** in accordance with Section IV. Paragraph B.5
- 3. The initial deposit to the Notional Commutation Account stated in Section VI., L. is paid in full.

#### 2. LEGAL EXPENSE AND DEFENSE

The Company shall have the right and the duty to defend any Claims covered under Coverages A. The Company's duty to defend or continue defending any such Claim, and to pay any Loss, shall cease once the applicable limit of liability, as described in Section V. (Limits of Coverage; Deductible) has been exhausted. Defense costs, charges and expenses are included in Loss and reduce the applicable limit of liability, as described in Section V. and are included within the Self-Insured Retention amount for the Coverage Section that applies and is shown in Item 3 of the Declarations. Counsel for the Defense of Claims shall be selected by the Insured from a pre-approved list, in consultation with the Company, which list may be updated periodically with the consent of the Company.

If the Company recommends a settlement of a Claim for:

## NOTICE: THIS INSURER IS NOT LICENSED IN THE STATE OF NEW YORK AND IS NOT SUBJECT TO ITS SUPERVISION

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- 2. a total amount in excess of the balance of the Self-Insured Retention and the Insured refuses such settlement, the Company's duty to defend the Insured shall then cease and the Insured shall thereafter negotiate or defend such Claim independently of the Company and the Company's liability for Loss or Clean-Up Costs shall be limited to that portion of the recommended settlement and the defense costs, charges and expenses as of the Insured's refusal of the recommended settlement which exceed the Self-Insured Retention and fall within the Limits of Liability. Notwithstanding anything to the contrary contained herein, if the settlement contemplates work or non-monetary contribution by the Insured, the Company and Insured shall consult in good faith about the merits of the settlement. Following such good faith consultation, and provided the work or non-monetary contribution of Insured materially prejudices Insured with regard to the performance of its obligations under the Consent Decree, Insured may decline the settlement without prejudice to coverage.

#### II. EXCLUSIONS

#### 1. COMMON EXCLUSIONS - APPLICABLE TO ALL COVERAGES

This Policy does not apply to Clean-Up Costs, Claims, or Loss arising from:

#### A. CONTRACTUAL LIABILITY:

liability of others assumed by the **Insured** under any contract or agreement, unless the liability of the **Insured** would have attached in the absence of such contract or agreement or the contract or agreement is an **Insured Contract**.

#### **B. TRANSPORTATION:**

of **Pollution Conditions** that result from the maintenance, use, operation, loading or unloading of any conveyance beyond the boundaries of the **Insured Site** during or following policy inception. This exclusion does not apply to **Treatment Waste Transportation**.

#### C. INTENTIONAL NONCOMPLIANCE:

Pollution Conditions based upon or attributable to any Responsible Insured's intentional, willful or deliberate noncompliance with any statute, regulation, ordinance, administrative complaint, notice of violation, notice letter, executive order, or instruction of any governmental agency or body, including but not limited to the Consent Decree and any orders, directives or instructions issued thereunder. This exclusion does not apply to such noncompliance, if any, which occurred prior to the Inception Date and resulted in the Pollution Conditions that are the subject of the Consent Decree.

#### D. INSURED vs. INSURED:

Any Claim by an exclusion does not apply to Claims initiated by three parties or Claims that arise out of an indemnification given by one Named Insured to another Named Insured in an Insured Contract. This exclusion shall not apply to coverage for the EPA or DTSC in the event the EPA or DTSC is the Named Insured.

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## E. EMPLOYER LIABILITY:

injury to any employee, director, officer, partner, leased or temporary worker of the Named Insured if such injury occurs during and in the course of said employment or arising out of any workers' compensation, unemployment compensation or disability benefits law or similar law.

F. NON-DISCLOSURE: arising from 1) any Claim known by a Responsible Insured and not disclosed to the Company prior to the Inception Date, other than the Claim that is the subject of the Consent Decree; or 2) facts, circumstances or information actually known to a Responsible Insured and willfully withheld from the Company with the intent to conceal from the Company prior to the Inception Date; or 3) facts, information or circumstances, other than the existence of the Pollution Conditions that are the subject of this Policy, actually known to the Responsible Insured prior to the Inception Date and not disclosed to the Company that would result in the Responsible Insured's reasonable expectation that a Claim for Bodily Injury or Property Damage for which written notice has not yet been received would likely be asserted.

#### G. MULTIPLIED DAMAGES/FINES/PENALTIES:

of civil, administrative or criminal fines or penalties, including Stipulated Penalties under the **Consent Decree**, assessments, punitive, exemplary or multiplied damages. However, solely with respect to Coverage B, this exclusion does not apply to costs and expenses, required under the **Consent Decree** other than fines and penalties including Stipulated Penalties, incurred to bring the remediation work into conformity with the demands of the requirements of the **Consent Decree**.

#### H. PRODUCTS LIABILITY:

the Insured's Products.

#### I. ASBESTOS AND LEAD:

asbestos or any asbestos-containing materials or lead-based paint. Solely with respect to Coverage B, this exclusion shall not apply to any such Clean-Up Costs incurred in Final Decommissioning permitted under the terms of this Policy.

#### J. INSURED'S PROPERTY/BAILEE LIABILITY:

or a result of **Property Damage** to property owned, leased or operated by, or in the care, custody or control of an **Insured**, even if such **Property Damage** is incurred to avoid or mitigate **Loss** which may be covered under this Policy.

### K. NATURAL RESOURCE DAMAGE

or for Natural Resource Damage.

L. WAR

Arising directly or indirectly as a result of or in connection with war, whether declared or not, or any act or condition incident to war. War includes civil war insurrection, act of foreign enemy, civil commotion, from a civil commotion, military or usurplus wer, rebellion or revolution.

#### M. SEISMIC EVENT

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any alteration of geological conditions and hydro-geological conditions resulting from a seismic event.

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#### 2. COVERAGE A EXCLUSIONS

The following exclusions apply to Coverage A.

#### A. OTHER APPLICABLE COVERAGES:

arising from Clean-Up Costs required under the Consent Decree or otherwise covered under Coverage B.

## B. INTERNAL EXPENSES:

for costs, charges or expenses incurred by the **Insured** for goods supplied or services performed by the staff or salaried employees of the **Insured**, or its parent, subsidiary or affiliate, except if in response to an emergency or pursuant to **Environmental Laws** that require immediate remediation of **Pollution Conditions or Pollutants**, or unless such costs, charges or expenses are incurred with the prior written approval of the Company in its sole discretion.

#### C. PROPERTY DAMAGE TO CONVEYANCES:

For Property Damage to any conveyance utilized in Treatment Waste Transportation.

## D. POLLUTION CONDITIONS PRIOR OR SUBSEQUENT TO TRANSPORTATION OF CARGO:

Arising from Pollution Conditions:

- 1. That commence prior to Treatment Waste Transportation; or
- 2. That commence after waste material transported in **Treatment Waste Transportation** reaches its final destination, or while such waste is in storage off-loaded from the conveyance that was transporting it.

#### E. THIRD-PARTY CARRIER CLAIMS:

Made by a third-party carrier engaged in Treatment Waste Transportation, its agents or employees, for Bodily Injury, Property Damage or Clean-Up Costs, whether or not the Bodily Injury, Property Damage or Clean-Up Costs were directly incurred by such third-party carrier. This exclusion does not apply to Claims arising from the Insured's negligence.

#### 3. COVERAGE B EXCLUSIONS

The following exclusions apply to Coverage B.

This Policy does not apply to Clean-Up Costs arising from:

#### A. BODILY INJURY OR PROPERTY DAMAGE:

any Bodily Injury or Property Damage.

#### B. THIRD-PARTY LIABILITY:

any liability to any third-party for any reason whatsoever, other than for Clean-Up Costs otherwise covered under this Caverage B.

## C. LABOR DISPUTES:

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delay due to labor disputes, including, but not limited to, strikes.

#### D. LICENSE SUSPENSION:

LICENSE SUSPENSION: Supervising Contractor performing work pursuant to the execution of the Consent Decree which is required by the Lead Oversight Agency.

#### E. BANKRUPTCY:

default, bankruptcy or insolvency of any entity(s) involved in the Clean-Up, but this exclusion does not apply if the entity(s) involved in the Clean-Up has a performance bond issued by a surety company on the Federal Register of the United States Department of the Treasury which in fact provides coverage for the Clean-Up at the time of such default, bankruptcy or insolvency. This exclusion shall not apply to coverage for the EPA or DTSC in the event the EPA or DTSC is the Named Insured.

#### F. DENIAL OF ACCESS:

any delay in obtaining, or failure to obtain, access to any property.

#### G. UNREASONABLE DELAY:

unreasonable delay in a Supervising Contractor's performance of Clean-Up, if such delay is within the control of the Supervising Contractor performing the Clean-Up. This exclusion shall not apply coverage for the EPA or DTSC in the event the EPA or DTSC is the Named Insured.

#### H. FAULTY WORKMANSHIP:

faulty workmanship or defective materials supplied or provided by the Supervising Contractor during Clean-Up performed pursuant to the requirements of the Consent Decree; provided such faulty workmanship or defective materials are discovered within one year after such work is accepted.

#### I. MODIFICATION OF THE STATEMENT OF WORK:

any modification of the Statement of Work unless:

- 1. Such modification is consented to in advance by the Company in writing, in its sole discretion; or
- 2. Such modification is required by the Lead Oversight Agency and permitted pursuant to the Consent Decree provided, in the event the Named Insured is not the EPA or DTSC, the Named Insured confers with the Company and selects the means that will minimize the payment of Clean-Up Costs under this Policy to the extent the Named Insured has the right or ability to accomplish the requirements of such modification through different means.

For purposes of this exclusion, changes in operations made pursuant to the Statement of Work shall not be considered modifications of the Statement of Work.

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#### J. OTHER APPLICABLE COVERAGES:

ered under Coverage A. any Clean-Up Cost



#### K. CITY RETAINED COSTS

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costs and obligations retained by the **Insured** pursuant to Section VI, 14(b) of the Consent Decree.  $\frac{c_1}{14}$ C.ANNE

#### 1. NEW TREATMENT PLANT COSTS

construction of any water treatment plants other than the Anticipated Treatment Plants and except if necessary as a result of Non-Routine O&M and the operation and maintenance of any water treatment plants other than the Newmark Operable Unit and the Muscoy Operable Unit including the Anticipated Treatment Plants. This exclusion shall not apply to operation and maintenance costs that are required under the Consent Decree as substitution for treatment at the Newmark Operable Unit and the Muscoy Operable Unit during any maintenance outages at those facilities or as part of required Non-Routine O&M under the Statement of Work.

#### M. PRODUCTION OF EXCESS WATER

treatment and operation and maintenance costs resulting from production of water in excess of that which is necessary to meet the performance criteria set forth in the Statement of Work.

#### N. PROPERTY ACQUISITION

arising from the purchase, leasing or other acquisition of land to build any water treatment plants and associated infrastructure, including the donation or dedication of land by the Named Insured to satisfy the requirements of the Consent Decree, except as required for Non-Routine O&M capital improvements.

#### O. DECOMMISSIONING COSTS

arising from all costs for Final Decommissioning of the extraction and treatment system unless approved by the Company in advance. This Exclusion shall not apply provided the balance of the Notional Commutation Account is positive at the time of such decommissioning and the Company has not posted a Loss reserve under Coverage A, however, coverage provided for such Clean-Up Costs shall be limited to the amount of the remaining balance credited to the Notional Commutation Account.

#### P. PERMIT COSTS

the application for, and acquisition of, any permits or insurance. This Exclusion shall not apply to costs associated with San Bernardino Municipal Water District employee staff time in reviewing permit related material required under the municipal ordinance required to be enacted under the Consent Decree.

#### Q. NON-REIMBURSABLE COSTS

costs which are non-reimbursable by the O&M Escrow or Construction Escrow.

#### **R. POTABLE WATER DELIVERY COSTS**

construction and/or operation maintenance and monitoring costs of the **Insured's** water supply system after the point of interconnection between the Newmark Operable Unit and/or Muscoy Operable Unit and the Insured's potable water supply system. This includes any additional

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treatment after acceptance of the water into the potable water system including but not limited to chlorination, disinfection and solid removal performed the treated water as required by the **Insured's** Water supply Permit to meet drinking water supply restriction.

#### S. ORDINANCE IMPLEMENTATION COSTS

the implementation and adoption the Insured's proposed ordinance to protect the extraction well system. Including but not limited to, purchasing any access, access easements, restrictive easements, or property access rights or costs associated with establishing land/water use restrictions. However, this Exclusion shall not apply to costs associated with San Bernardino Municipal Water District employee staff time in reviewing permit related material required by the proposed ordinance and costs associated with the Ground Water Model.

#### T. REGULATORY OVERSIGHT

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Oversight Costs from the EPA, DTSC, or other regulatory agencies.

#### U. BREACH OF PROFESSIONAL SERVICES

breach of Professional Services.

#### **III. NOTICE REQUIREMENTS AND CLAIM PROVISIONS**

The Insured shall provide the Company with notice of Pollution Conditions and Claims as follows:

## A. NOTICE OF POLLUTION CONDITIONS, CLAIMS, AN INTERRUPTION AND POLLUTANTS

1. The **Insured** shall give notice of **Claims**, as described in 2. below, as soon as soon as possible after the **Claim** becomes known to the **Responsible Insured**, but in any event during the **Policy Period** or during the Extended Reporting Period if applicable, to:

> Manager, Pollution Insurance Products Unit AIG Technical Services, Inc. Environmental Claims Department 101 Hudson St. - 31<sup>st</sup> Fl. Jersey City, NJ 07302 Fax: 201-631-5051

or other address(s) as substituted by the Company in writing.

- 2. When a Claim has been made, the Insured shall furnish information at the request of the Company and the Insured shall forward the following to the Company as soon as possible after the Claim becomes known to the Responsible Insured:
  - (a) All reasonably obtainable information with respect to the time, place and circumstances thereof, and the names and addresses of the claimant(s) and available witnesses.
  - (b) All demands, summonses, notices or other process or papers filed with a court of law, administrative agency or an investigative body;
  - (c) Other information in the possession of the **Insured** or its hired experts which the Company reasonably deems necessary.

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## IV. RIGHTS OF THE COMPANY AND DUTIES OF THE INSURED IN THE FYENT OF POLLUTION CONDITIONS AND IN CONNECTION WITH MEDIAL ACTIVITIES

#### A. Pollution Conditions - Coverage A

#### 1. The Company's Rights

The Company shall have the right but not the duty to clean up or mitigate Pollution Conditions upon receiving notice as provided in Section III. of this Policy. Any sums expended in taking such action by the Company will be deemed incurred or expended by the Insured and shall be applied against the limits of coverage and Self-Insured Retention under this Policy.

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#### 2. Duties of the Insured

The Named Insured shall have the duty to clean up Pollution Conditions to the extent required by Environmental Laws, by retaining competent professional(s) or contractor(s) mutually acceptable to the Company and the Named Insured. The Company shall have the right but not the duty to review and approve all aspects of any such clean-up. The Named Insured shall notify the Company of actions and measures taken pursuant to this paragraph.

#### B. Consent Decree Clean-Up Activities - Coverages B

- The Company shall have the right, but not the duty, to review, assess and inspect all aspects of any Clean-Up to which Coverage B applies. Neither the Company's rights nor its exercise of the rights under this paragraph shall constitute an undertaking to determine or warrant that the Clean-Up is safe, healthful, or in conformity with applicable law.
- 2. Subject to Condition H, the Named Insured shall take all reasonable and prudent steps to minimize Clean-Up Costs, limit interference with Clean-Up, and prevent the spread of further contamination. In the event the Named Insured has any rights or ability under the Consent Decree to cure any deficiency, failure, or breach or any rights or ability to contest any modification of the Statement of Work or other obligations under the Consent Decree, the Named Insured agrees that it shall consult with the Company in a reasonable time before such rights or ability are prejudiced and that the Named Insured shall, to the extent of its own rights under the Consent Decree, cooperate with the Company in good faith to minimize Clean-Up Costs.
- 3. The Insured shall report, to the address stated in paragraph A.1 of Section III. above, increased quantity, concentration or disbursement of Pollution Conditions, and the discovery of Pollution Conditions different than those identified in the Scope of Work.
- 4. Except in the event the EPA or DTSC is Named Insured, The Named Insured shall keep detailed records of all Clean-Up Costs and provide the Company with access to such records, and shall provide completed copies of the attached Clean-Up Progress Report at the time intervals prescribed in Item 6. of the Declarations.
- 5. To the extent of the **Insured's** legal right of access, the **Insured** shall permit the Company to inspect the Operable Units identified in the **Consent Decree** and any portion of the **Insured Site**, and all financial records, drawings, plans and specifications concerning the **Clean-Up** or **Clean-Up Costs** as often as the Company chooses after providing reasonable notice.
- 6. The Insured shall cooperate with the Company by providing the Company with:
  - (a) Access to all information developed or discovered by the Insured concerning the Clean-Up, whether or not deemed by the Insured to be relevant;

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- (b) Reasonable access to interview any agent, servant or employee of the Insured or any tor or subcontractor involved in the C Supervising C p; and
- (c) Access to other information or other responses to reasonable requests from the Company concerning the Clean-Up.

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#### V. LIMITS OF COVERAGE; SELF-INSURED RETENTION

Regardless of the number of Claims, claimants, or Pollution Conditions the following limits of liability apply

#### A. Policy Aggregate Limit

The Company's total liability for all Loss, under Coverage A and all Clean-Up Costs under Coverage B combined shall not exceed the "Policy Aggregate" stated in Item 4 of the Declarations.

#### B. Sub-Limit Coverage A.

Subject to the "Policy Aggregate" limit described in V.A, above, The Company's total liability for all Loss, under Coverage A shall not exceed the \$25,000,000.

#### C. Treatment Waste Transportation Sub-Limit

Subject to the "Policy Aggregate" limit described in V.A, above, The Company's total liability for all Loss arising from Treatment Waste Transportation, under Coverage A shall not exceed the \$1,000,000.

#### D. Non-Routine O&M Sub-Limit

Subject to the "Policy Aggregate" limit described in V.A, above, a Sub-Limit shall apply to all Clean-Up Costs that are Non-Routine O&M Costs paid under Coverage B. The Sub-Limit shall be the Net Present Value of \$20,000,000 calculated from January 1, 2003 as described in this Paragraph. On an annual basis this Sub-Limit will be adjusted as follows: the Sub-Limit at the beginning of the coverage year (on the Inception Date, \$20,000,000 multiplied by 1.03 compounded annually from January 1, 2003) less Clean-Up Cost that are Non-Routine O&M Costs paid during the coverage year multiplied by 1.03 compounded annually from January 1, 2003 shall equal the amount of the Sub-Limit available for the following coverage year.

#### E. Groundwater Model Sub-Limit

Subject to the "Policy Aggregate" Limit described in V.A, above, a Sub-Limit shall apply to all Clean-Up Costs for development and management of the Ground Water Model combined with expenditures to implement Section IX of the Consent Decree (Access and Institutional Controls.) The Sub-Limit shall be shall be the Net Present Value of \$1,000,000 calculated from January 1, 2003 as described in this paragraph. On an annual basis this Sub-Limit will adjusted as follows: the Sub-Limit at the beginning of the coverage year (on the Inception Date \$1,000,000 multiplied by 1.03 compounded annually from January 1, 2003) less Clean-Up Cost that are for development and management of the Ground Water Model combined with expenditures to implement Section IX of the Consent Decree (Access and Institutional Controls) paid during the coverage year multiplied by 1.03 compounded annually from January 1, 2003 shall equal the amount of the Sub-Limit available for the following coverage year.

#### F. Construction Escrow Account Sub-Limit

Subject to the "Policy pegate" limit described in V.A, above, Limit shall apply to all Clean-Up Costs that are for Clean-Up that is reimbursable from the Construction Escrow Account and paid under Coverage B. The Sub-Limit shall be the Net Present Value of \$10,000,000 calculated from January 1, 2003 as described in this paragraph. On an annual basis this Sub-Limit will be adjusted as follows: the Sub-Limit at the beginning of the coverage year (on Inception Date, \$10,000,000 multiplied by 1.03 compounded annually from January 1, 2003) less Clean-Up Cost that are for Clean-Up that Lis reimbursable from the Construction Escrow Account paid during the coverage year multiplied by 1.03 compounded annually from January 1, 2003 shall equal the amount of the Sub-Limit available for the following coverage year.

#### G. Self Insured Retention - Coverage A

Subject to Paragraphs V.A. and V.B., above, this Policy is to pay covered Loss under Coverage A, in excess of the Self-Insured Retention amount of \$250,000. The Self-Insured Retention of \$250,000 shall be applicable to Each Incident. For purposes of this provision, Each Incident shall mean all Loss arising from the same, continuous or related Pollution Conditions. The Self-Insured Retention amount is to be borne by the Insured and is not to be insured. The insurance provided by this Policy shall be excess over the Self-Insured Retention, whether such Self-Insured Retention is collectible or not collectible by reason of the refusal or inability of the Insured to pay the retention amount due to insolvency, bankruptcy or any other reason. In no event shall the Company be responsible to make any payment under this Policy before the Insured has paid the Self-Insured Retention, and the risk of uncollectibility (in whole or in part) of such Self-Insured Retention is expressly retained by the Insured and is not in any way or under any circumstances insured or assumed by the Company.

The **Insured** shall promptly reimburse the Company for advancing any element of Loss falling within the Self-Insured Retention.

#### **VI. CONDITIONS**

- A. Assignment This Policy may only be assigned on the request of the Named Insured with the prior written consent of the Company, which consent shall not be unreasonably withheld or delayed. Assignment of interest under this Policy shall not bind the Company until its consent is endorsed thereon.
- B. Subrogation In the event of any payment under this Policy, the Company shall be subrogated to all the Insured's rights of recovery therefor against any person or organization and the Insured shall execute and deliver instruments and papers and do whatever else is necessary to secure such rights including without limitation, assignment of the Insured's rights against any person or organization who caused Pollution Conditions or is responsible for any Pollutants on account of which the Company made any payment under this Policy. The Insured shall do nothing to prejudice the Company's rights under this paragraph subsequent to Loss. Any recovery as a result of subrogation proceedings arising out of the payment of Loss or Clean-Up Costs covered under this Policy shall accrue first to the Insured to the extent of any payments in excess of the limit of coverage then to the Company to the extent paid from the balance of the Notional Commutation Account, which amounts shall be re-credited to the Balance of Notional Commutation Account; then to the Company to the extent of its payment under the Policy and to the Insured to the extent of its Self-Insured Retention. Expenses incurred in such subrogation proceedings shall be apportioned among the interested parties in the recovery in the proportion that each interested party's share in the recovery bears to the total recovery. Notwithstanding the foregoing, the Company expressly waives its rights of subrogation against the County of San Bernardino for Pollution Conditions which commenced prior to the Inception Date. This Condition shall not apply to the rights of recovery of the EPA or the DTSC in the event EPA or DTSC is the Named Insured.

- C. Cooperation The Insured shall cooperate with the Company and offer all reasonable assistance in the investigation and defense of Claims or the evaluation of Clean-Up firsts under the applicable Coverages purchased. The Company may require that the Insured submit to mination under oath, and attend hearings, depositions and trials. In the course of investigation of Cleanse, the Company may require written statements or the Insured's attendance at meetings with the Company. The Insured must assist the Company in effecting settlement, securing and providing evidence and obtaining the attendance of witnesses. This Condition shall not apply to EPA or DTSC if they are a Named Insured.
- D. Changes Notice to any agent or knowledge possessed by any agent or by any other person shall not effect a waiver or a change in any part of this Policy or estop the Company from asserting any rights under the terms of this Policy; nor shall the terms of this Policy be waived or changed, except by endorsement issued by the Company to form a part of this Policy.
- E. Voluntary Payments No Insured shall voluntarily enter into any settlement, or make any payment or assume any obligation unless in response to an emergency or pursuant to Environmental Laws that require immediate remediation of Pollution Conditions, without the Company's consent which shall not be unreasonably withheld, except at the Insured's own cost. This provision shall not apply to covered Clean-Up Costs under Coverage B.
- F. Concealment or Fraud This entire Policy shall be void as of its inception if, whether before or after Clean-Up Costs are incurred or a Claim is first made, the Named Insured has willfully concealed or misrepresented any fact or circumstance material to the granting of coverage under this Policy, the description of the Insured Site, or the interest of the Insured therein.
- G. Cancellation This Policy may be cancelled by the Named Insured with the prior written consent of the Lead Oversight Agency and Support Oversight Agency by surrender thereof to the Company or any of its authorized agents or by mailing to the Company written notice stating when, not less than thirty (30) days thereafter the cancellation shall be effective. Cancellation by the Named Insured must be accompanied by commutation of this contract pursuant to Condition N. of this Section VI. Provided the EPA or DTSC is not the Named Insured under Coverage B pursuant to Section VI., O, this Policy may be cancelled by the Company only for the reasons stated below by mailing to the Named Insured at the address shown in the Policy and to the Lead Oversight Agency and Support Oversight Agency, written notice stating when not less than 60 days (10 days for nonpayment of premium and 30 days for cancellation pursuant item 3 below) thereafter such cancellation shall be effective. Proof of mailing of such notice shall be sufficient proof of notice.
  - 1. Material misrepresentation by the Insured;
  - 2. The insured's failure to comply with the material terms, conditions or contractual obligations under this Policy, including the failure to pay any premium or any element of Loss within the Self-Insured Retention advanced by the Company when due, provided such failure to comply has not been cured within 60 days, {10 days for the non-payment of premium or reimbursement of any Self-Insured Retention advanced by the Company;

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The time of surrender or the effective date and hour of cancellation stated in the notice shall become the end of the **Policy Period**. Delivery of such written notice either by the **Named Insured** or by the Company shall be equivalent to mailing.

If the **Named Insured** or the Company cancels, premium returned to the **Named Insured** shall be computed pursuant to Paragraph M. of this Section VI., "Earning of Premium" and the Balance credited to the Notional Commutation Account shall be paid out in accordance with Paragraph N of this Section VI., "Notional Commutation Account."

- H. Other Insurance Where other insurance or surety bonds may be available for Loss or Clean-Up Costs covered under this Policy, the Insured shall promptly upon request of the Company provide the Company with copies of all stabilities. With respect to Coverage insurance is primary and the Company's obligations of primary insurer are not effected by any cover insurance that may be primary. With respect to Coverage B, if other valid and collectible insurance is available to the Insured for Loss or Clean-Up Costs covered by this Policy, the Company's obligations are limited as follows:
  - 1. With respect to Coverage A, subject to 3., below of this paragraph H, this insurance is primary, and the Company's obligations are not affected unless any of the other insurance is also primary. In that case, the Company will share with all such other insurance by the method described in Paragraph 2. below.
  - 2. If all of the other insurance permits contribution by equal shares, the Company will follow this method also. Under this approach each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first. If any of the other insurance does not permit contribution by equal shares, the Company will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.
  - 3. Solely with respect to Loss arising from Treatment Waste Transportation covered under Coverage A, this insurance is excess over any other Insurance providing coverage for such Loss.
  - 4. Insurance policies or indemnification agreements for Loss excluded from the Consent Decree or Operable Units excluded from the Consent Decree shall not fall within the scope of this condition.
- 1. Right of Access and Inspection To the extent the Insured has such rights, any of the Company's authorized representatives shall have the right and opportunity but not the obligation to interview persons employed by the Insured and to inspect at any reasonable time, during the Policy Period or thereafter, any Operable Unit identified in the Consent Decree and locations on the Insured Site. Neither the Company nor its representatives shall assume any responsibility or duty to the Insured or to any other party, person or entity, by reason of such right or inspection. Neither the Company's right to make inspections, sample and monitor, nor the actual undertaking thereof nor any report thereon shall constitute an undertaking on behalf of the Insured or others, to determine or warrant that property or operations are safe, healthful or conform to acceptable engineering practices or are in compliance with any law, rule or regulation. The Named Insured agrees to provide appropriate personnel to assist the Company's representatives during any inspection.
- J. Access to Information The Named Insured agrees to provide the Company with access to any information developed or discovered by the Insured concerning Loss or Clean-Up Costs covered under this Policy, whether or not deemed by the Insured to be relevant to such Loss or Clean-Up Costs and to provide the Company access to interview any Insured and review any documents of the Insured.
- K. Representations By acceptance of this Policy, the Named Insured agrees that the statements in the Declarations, the Application and Warranty are their agreements and representations, that this Policy is issued in reliance upon the truth of such representations and that this Policy embodies all agreements existing between the Insured and the Company or any of its agents relating to this insurance. The Named Insured City of San Bernardino specifically agrees and acknowledges that the Warranty Statement made by the Responsible Insured and made a part of the Application of this Policy is authorized to be made on behalf of the City of San Bernardino and shall be binding upon the City of San Bernardino.
- L. Action Against Company No third-party action shall lie against the Company, unless as a condition Copyright, American International Group, Inc.® 2000

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precedent thereto there shall have been full compliance with all of the terms of this Policy, nor until the amount of the **Insured** poligation to pay shall have been finally remined either by judgment against the **Insured** after actual for by written agreement of the **Insure** claimant and the Company.

Any person or organization or the legal representative thereof who has secured such judgment or written agreement shall thereafter be entitled to recover under this Policy to the extent of the insurance afforded by the Policy. No person or organization shall have any right under this Policy to join the Company as a party to any action against the **Insured** to determine the **Insured's** liability, nor shall the Company be impleaded by the **Insured** or his legal representative. Bankruptcy or insolvency of the **Insured** or of the **Insured's** estate shall not relieve the Company of any of its obligations hereunder.

- M. Earning of Premium \$----- (this will be the actual \$ amount of the premium that is earned at inception The risk transfer PLL premium and 25% of the Cost Cap) will be earned at Inception Date. The remaining premium that is not credited to deposit in the Notional Commutation Account shall be deemed earned subject to the Return Premium Schedule Endorsement attached to this Policy. Any cancellation of the Policy by the Insured shall not result in a return of any premium deemed earned.
- N. Notional Commutation Account the Company will maintain a notional commutation account balance calculated as follows:
  - 1. \$ INITIAL DEPOSIT ; plus
  - 2. Funds Growth credited as per below; less
  - 3. 100% of Clean-Up Costs and Loss paid by the Company under Coverages A and B; plus
  - 4. Water Sale Recoveries;
    - Funds Growth: The notional commutation account, if positive, will earn interest at an annual rate equal to the 1 year Constant Maturity Treasury (CMT) yield. The annual interest rate applied will be updated annually based upon the CMT yield in effect on each anniversary date of the Inception Date.
    - Water Sales Recovery: Subject to the Funds Growth described in the forgoing paragraph, the Company shall keep a separate account of the portion of the Notional Commutation Account Balance representing deposits based on Water Sales Recoveries. That portion of the Notional Commutation Account balance that represents deposits based on Water Sales Recoveries shall be available only for the payment of Clean-Up Costs under Coverage B and shall not be applied to the payment of any Loss under Coverage A.
    - Commutation: Prior to issuance of a final Certificate of Completion, the Named Insured under Coverage B may elect to commute this contract with the prior written consent of the Lead Oversight Agency, and where required pursuant to the Consent Decree, the participation of the Support Oversight Agency, by providing the Company thirty (30) days prior written notice. In the event the EPA or DTSC is the Named Insured under Coverage B pursuant to Section VI., O, such notice must be accompanied by the written consent of the Named Insured under Coverage A. If the Named Insured under Coverage B or as directed by that Named Insured, an amount equal to 100% of the balance of the Notional Commutation Account in exchange for a complete release from all Named Insureds, on behalf of all Insureds, of the Company's liability for all Clean-Up Costs and Loss covered under both Coverages A and B of this Policy whether known or unknown.

Further, upon receipt of the final **Certificate of Completion** the **Named Insured** under Coverage B may elect to commute all coverage under Coverages A and B by providing the Company thirty (30) days prior written notice. In the event the

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EPA or DTSC is the Named Insured under Coverage B at time of issuance of a final Certificate of Completion, pursuant to Section VI., O., written consent of Named Insured under Coverage A to not be required. If the Named under Coverage B so elects, the coverage and will pay the Named Insured under Coverage A an amount equal to 50% of the balance of the Notional Commutation Account and the remaining 50% to the EPA in exchange for a complete release from all Named Insureds, on behalf of all Insureds, of the Coverages A and B of this Policy whether known or unknown.

If upon expiration of the Policy Period the final Certificate of Completion has not been received, in exchange for a complete release from all Named Insureds, on behalf of all Insureds, of the Company's liability for all Clean-Up Costs and Loss covered under both Coverages A and B of this Policy, whether known or unknown, the remaining balance of the Notional Commutation Account shall be paid to an escrow account designated by the Named Insured under Coverage B, for the benefit of the Named Insured under Coverage B in performing the Clean-Up necessary to receive the final Certificate of Completion which may include payment into an escrow account created for the purpose of holding and administrating proceeds from the Guaranteed Investment Contract established to pay for Clean-Up after the expiration of the Policy.

#### O. Work Takeover -

- A. in the event either the EPA or DTSC can exercise its right to assume the performance of all or any portion of the Clean-Up pursuant to Section 109 of the Consent Decree, the Company shall, to the extent of the City of San Bernardino's rights pursuant to the Consent Decree or as otherwise agreed upon by the EPA and DTSC, first have the ability to cure any condition or deficiency that may result in such a work take over. Subject to the available limit of liability of this Policy, the Company shall have the right, but not the duty to elect at its sole discretion to:
  - provide sufficient additional resources to the Named Insured to remedy any condition or deficiency that may result in work takeover; or
  - 2) Obtain bids or negotiate proposals, on behalf of the Named Insured, from contractors and competent professionals acceptable to the Lead Oversight Agency as a replacement Supervisory Contractor for a contract for completion of the work required under the Consent Decree and arrange for a contract to be executed by and between the Named Insured and such replacement Supervisory Contractor; or
  - 3) Undertake to perform and complete the Clean-Up through independent contractors and competent professionals that are satisfactory to the Lead Oversight Agency. In which event, the expiration date of the Policy Period, applicable to Coverage A only, shall be the date the Company agrees to undertake to perform and complete the Clean-Up; or
  - 4) Perform or complete any task, obligation, remedy or right available to the Named Insured, City of Bernardino pursuant to the terms of the Consent Decree.

It shall be condition precedent of any coverage under this Policy that the **Named Insured shall** fully cooperate with the Company in the selection and retention process, including the execution of any contracts, necessary to contract with any replacement **Supervisory Contractor** pursuant to b) above of this Condition O.

B. In the event either the EPA or DTSC can exercise its right to assume the performance of all or any portion of the Clean-Up pursuant to Section 109 of the Consent Decree and the Company does not elect to exercise any right under Paragraph A., of this Condition O. Upon the written request of

either the EPA or DTSC the Company shall replace the City of San Bernardino as Named Insured with the entity requesting substitution. The City of San Bernardino agrees and acknowledges that the Company may solely upon the representation of the or DTSC that work take over is permitted pursuant the terms of the Consent Decree, and the City of San Bernardino hereby releases and holds harmless the Company from any claim, demand, loss or liability asserted by the City of San Bernardino arising from the Company's reliance upon such written representation of the EPA or DTSC.

In the event the EPA or DTSC replaces the City of San Bernardino as Named Insured the following shall apply:

- 1) The EPA or DTSC shall become the Named Insured under Coverage B only as of the first date on which such Work Takeover occurs.
- 2) The EPA or DTSC shall, subject to the other provisions of this Section VI., Paragraph O., assume all the responsibilities of the Named Insured under Coverage B.
- 3) The addition of the EPA or DTSC as Named Insured under Coverage B shall not change the Limits of Liability, the amount credited to the Notional Commutation Account, the Statement of Work or, subject to the other provisions of this Section VI., Paragraph O., any terms or conditions of the Policy. Sums expended by the EPA or DTSC prior to becoming the Named Insured shall not be Clean-Up Costs.
- 4) The EPA or DTSC shall become the Named Insured under Coverage B until such date as the EPA or DTSC ceases implementation of the Work Takeover and responsibility for execution of the Clean-Up reverts to the Named Insured, City of San Bernardino or the Company.
- 5) The EPA or DTSC shall assume all the rights and benefits of the Named Insured under the Coverage B of the Policy and, subject to the other provisions of this Section VI., Paragraph O., all the responsibilities of the Named Insured under Coverage B under the Policy including, but not limited to, providing Clean-Up Cost Progress Reports, reporting the discovery of new Pollutants or increases in the concentration or disbursement of known Pollutants, and receiving notice of cancellation.
- 6) Notice of cancellation and all other notices under the Policy shall be sent to shall be sent to:

Assistant Regional Counsel

DTSC

City of San Bernardino Municipal Water Department Attention: General Manager PO Box 710 San Bernardino, CA 92418

7) After the occurrence and during the continuation of a Work Takeover as described above, and for such period as the EPA or DTSC is the Named Insured under the Policy: I) the Company shall not have the right to perform, manage, or undertake Clean-Up, nor the right to approve any new Supervising Contractor without the prior written consent of the EPA and



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DTSC. II) Each and every obligation and responsibility of the EPA or DTSC, as Named Insured under the Policy, shall apply only if and to the extent permitted by all laws, regulations, policies, ar the delines applicable to the EPA or DTSC and Any obligation or responsibility imposed on EPA or DTSC, as Named Insured und the Policy, that violates, conflicts with, or is inconsistent with any law, regulation, policy, or guideline applicable to the EPA or DTSC shall be null and void, in each case without prejudice to the effectiveness of the remaining obligations, responsibilities, rights, and benefits applicable to the EPA or DTSC as Named Insured under the Policy. However, under no circumstances shall the Policy Term as outlined in the Declarations and the Limit of Liability as outlined in the Declarations be modified or considered null and void. Costs are presumptively reasonable and necessary.

- 8) Nothing herein shall prevent the EPA or the DTSC from exercising, at its sole discretion, return of control of Clean-Up to the City of san Bernardino or the Company.
- P. Payment of Premium Full payment of premium is due upon the earliest of the 180<sup>th</sup> day after the Inception Date or notice to the Company of any Claim. Subject to the foregoing, payment of premium in full must be made within 3 days of the Named Insured's receipt of proceeds of the settlement from the United States. The Company shall have no liability to any Insured and no obligation to defend or indemnify any Insured for any Claim or Clean-Up Costs until the Premium is paid in full. This Policy shall be void *ab initio* in the event premium is not fully paid by the 180<sup>th</sup> day after the Inception Date. In the event premium is not paid within 90 days, the premium due shall be increased by applying to the unpaid premium the interest rate applicable to the late payment of the settlement established pursuant to the Consent Decree.
- Q. Service Of Suit Subject to paragraph M above, it is agreed that in the event of failure of the Company to pay any amount claimed to be due hereunder, the Company, at the request of the Insured, will submit to the jurisdiction of a court of competent jurisdiction within the United States. Nothing in this condition constitutes or should be understood to constitute a waiver of the Company's rights to commence an action in any court of competent jurisdiction in the United States, to remove an action to a United States District Court, or to seek a transfer of a case to another court as permitted by the laws of the United States or of any state in the United States. It is further agreed that service of process in such suit may be made upon Counsel, Legal Department, American International Specialty Lines Insurance Company, 70 Pine Street, New York, New York 10270, or his or her representative, and that in any suit instituted against the Company upon this contract, the Company will abide by the final decision of such court or of any appeal.

Further, pursuant to any statute of any state, territory, or district of the United States which makes provision therefor, the Company hereby designates the Superintendent, Commissioner, Director of Insurance, or other officer specified for that purpose in the statute, or his or her successor or successors in office as its true and lawful attorney upon whom may be served any lawful process in any action, suit or proceeding instituted by or on behalf of the **Insured or** any beneficiary hereunder arising out of this contract of insurance, and hereby designates the above named Counsel as the person to whom the said officer is authorized to mail such process or a true copy thereof.

- R. Acknowledgment of Shared Limits By acceptance of this Policy, the Named Insureds understand, agree and acknowledge that the Policy contains a Policy Aggregate Limit that is applicable to, and will be shared by, all Named Insureds and all other Insureds who are or may become insured hereunder. In view of the operation and nature of this shared Policy Aggregate Limit, the Named Insureds and all other Insureds understand and agree that prior to filing a Claim under the Policy, the Policy Aggregate Limit may be exhausted or reduced by prior payments for other Claims under the Policy.
- S. Sole Agent the person or entity named in Item 1 of the Declarations, or EPA or DTSC in the event they have assumed the rights of Named Insured pursuant to Paragraph O. of this Section VI., "Work Takeover," shall act on behalf of all other Insureds, if any, for the payment or return of any premium,



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payment of any deductible, receipt and acceptance of any endorsement issued to form a part of this Policy, giving and receiving notice of cancellation or nonrenewal, and the exercise of the rights provided in the **Extended Report** priod clause.

- T. Authorship The Company and the Named Insureds agree that this Policy reflects the joint drafting efforts of the Company and the Named Insureds. In the event any dispute, disagreement or controversy arises regarding this agreement, the Company and the Named Insureds agree that they shall be considered joint authors and no provision shall be interpreted against the Company or the Named Insureds because of authorship. The Company and the Named Insureds also agree that they are fully informed as to the meaning and intent of this Policy and have been advised counsel in that regard.
- U. Water Sales Recoveries Amounts paid to the Named Insured as Clean-Up Costs under Coverage B of this Policy shall be reimbursed to the Company by payment of Water Sales Recoveries from the Named Insured to the Company. Such reimbursements shall restore the previously eroded Policy Aggregate Limit of Liability and shall not increase the Policy Aggregate Limit of Liability. The Named Insured shall provide the Company an annual statement, 90 days after the close of the Named Insured's fiscal year, detailing the amount of Water Sales Recoveries collected during the Named Insured's preceding fiscal year.
- V. Choice of Forum The Insured and the Company agree that the United States District Court for the Central District of California shall be the forum for any litigation, arbitration or other form of formal dispute resolution concerning the meaning, interpretation or operation of any term, condition, definition or provision of this Policy or the fulfillment by the Insured or the Company of any obligations with respect to the Policy.

#### VII. EXTENDED REPORTING PERIOD FOR CLAIMS - COVERAGE A

The Named Insured shall be entitled to an Automatic Extended Reporting Period for Coverage A upon termination of coverage as defined below in this Section VII. The Automatic Extended Reporting Period shall not reinstate or increase any of the limits of liability of this Policy.

Provided that the Named Insured has not purchased any other insurance to replace this insurance and which applies to a Claim otherwise covered hereunder, the Named Insured shall have the right to the following: a period of one hundred and eighty sixty (180) days following the effective date of such termination of coverage in which to provide written notice to the Company of Claims first made and reported within the Automatic Extended Reporting Period.

A Claim first made and reported within the Automatic Extended Reporting Period will be deemed to have been made on the last day of the Policy Period, provided that the Claim arises from Pollution Conditions that commenced before the end of the Policy Period and is otherwise covered by this Policy.

For purposes of this provision, termination of coverage occurs at the time of cancellation or nonrenewal of this Policy by the Named Insured or by the Company except as provided under Condition M of Section VI above.

#### VIII. DEFINITIONS

- A. Anticipated Treatment Plants means up to three new treatment plants to be initially constructed after the Inception Date which are materially similar in specifications to the plants described in the "Facility Table 39A" dated March 10, 2004.
- **B.** Bodily Injury means physical injury, or sickness, disease, mental anguish or emotional distress, sustained by any person, including death resulting therefrom.



- C. Claim means a written demand received by the Insured seeking a remedy or alleging liability or responsibility on the part of the Insured for Loss under Coverage A
- D. Clean-Up means those **Serv**ities, identified in the Statement of Worker ached to and made a part of this Consent Decree that are performed by a Supervising Contractor in the execution of the Consent Decree.
- E. Clean-Up Costs means:
  - 1. With respect to Coverage A, reasonable and necessary expenses, including legal expenses incurred with the Company's written consent which consent shall not be unreasonably withheld or delayed; for the investigation, removal, remediation including associated monitoring, or disposal of soil; surfacewater, groundwater or other contamination:
    - (a) To the extent required by Environmental Laws; or
    - (b) That have been actually incurred by the government or any political subdivision of the United States of America or any state thereof, or by third parties, to the extent required by Environmental Laws.

Clean-Up Costs under Coverage A also include Restoration Costs.

- 2. With respect to Coverage B, reasonable and necessary costs, charges, and expenses incurred solely for Clean-Up, as identified in the Definition of Clean-Up Endorsement which pursuant to the Consent Decree are reimbursable from the O&M Escrow Account or Construction Escrow;
- 3. Solely with respect to Coverages B, Clean-Up Costs does not include costs, charges or expenses incurred for legal services of any nature and for costs, charges or expenses litigation, arbitration or other form of dispute resolution other than arbitration in any way related to or in connection with Clean-Up, including fees of attorneys, consultants, investigators, adjusters and experts, unless otherwise expressly consented to in writing and in advance by the Company and specifically included in the Definition of Clean-Up Endorsement.
- 4. Solely with respect to Coverage B, and solely in the event Clean-Up Costs are incurred as the result of Non-Routine O&M, the Clean-Up Costs shall not include that portion of costs attributable to capital improvements or upgrades which exceed the requirements of the Consent Decree or provide benefit to the Insured's operations beyond the requirements of the Consent Decree.
- F. Clean-Up Cost Progress Reports means reports completed by the Insured which summarize Clean-Up activities performed and anticipated to be performed and the costs and estimated costs of those activities. Except in the event the EPA or DTSC is the Named Insured, the form of the reports will be established by the Company and attached to this policy and must be completed by the Insured and submitted to the Company at the time intervals prescribed in Item -----of the Declarations. n In the event EPA or DTSC is the Named Insured under Coverage B, such reports shall be consistent with the reports prepared by those agencies pursuant to the Consent Decree.
- **G. Consent Decree** means the Consent Decree entered in the Matter of The City of San Bernardino United States of America CV 96-8867(MRP) CV-5205(MRP) Consolidated dated \_\_\_\_\_.
- H. Certification or Notice of Completion shall have the same meaning as in the Consent Decree.
- I. Construction Escrow Account shall have the same meaning as in the Consent Decree.
- J. DTSC means the California Department of Toxic Substances Control and any of its successor departments or agencies.

- K. Environmental Laws means any federal, state, provincial or local-laws (including, but not limited to, statutes, rules, regulations, ordinances, guidance document and governmental, judicial or administrative orders and irrectives) that are applicable to Pollution conditions. Environmental Laws shall not include any ordinance, rule, regulation, or guidance document enacted or issued by any municipal authority concerning the clean-up standards or action levels applicable to Pollution Conditions that are the subject of coverage under this Policy.
- L. EPA means the United States Environmental Protection Agency and any successor departments for agencies thereto.
- M. Final Decommissioning shall mean decommissioning of the extraction and treatment systems if done pursuant to the Consent Decree, provided that such decommissioning will result in termination of coverage B.
- N. Groundwater Model shall have the same meaning as in the Consent Decree.
- O. Inception Date means the date set forth in Item 2 of the Declarations.
- P. Insured means the Named Insured, and any past or present director, official, officer, partner or employee thereof, including a temporary or leased employee, while acting within the scope of his or her duties as such.
- Q. Insured Contract means a contract or agreement submitted to and approved by the Company, and listed on a Schedule of Insured Contracts Endorsement attached to this Policy.
- R. Insured's Products means water treated by the Insured or others trading under the Insured's name including but not limited to potable water and includes warranties or representations made at any time with respect to the fitness, quality, durability, performance or use thereof, or the failure to provide warnings or instructions.
- S. Insured Site means the Newmark Groundwater Contamination Site as listed by the EPA on the National Priority List set forth in 40 C.F.R. Part 300, Appendix B, by publication in the Federal Register on March 31, 1989, 54 Fed. Reg. 13296, 13301.
- T. Lead Oversight Agency means the EPA or the DTSC or any other entity named as the Lead Oversight Agency under the terms of the Consent Decree.
- U. Loss means, under the applicable Coverages: 1. monetary awards or settlements of compensatory damages for **Bodily Injury or Property Damage**; 2. costs, charges and expenses incurred in the defense, investigation or adjustment of **Claims** for such compensatory damages or for **Clean-Up Costs**; or 3. **Clean-Up Costs**.
- V. Microbial Matter means fungi, bacterial or viral matter which reproduces through the release of spores or the splitting of cells or other means, including but not limited to, mold, mildew and viruses, whether or not such Microbial Matter is living.
- W. Muscoy Operable Unit shall have the same meaning as in the Consent Decree,
- X. Named Insured means the City of San Bernardino, California and the City of San Bernardino Municipal Water Department, including any of their divisions, departments, agencies or other subdivisions, and any successors thereto or, solely with respect to Coverage B and subject to Paragraph O. of Section VI. of this Policy, "Work Takeover," the EPA or DTSC.



- Y. Natural Resource Damage means physical injury to or destruction of, including the resulting loss of value of, land, fish, wildlife, biota, air, water, groundwater, drinking water, supplies, and other such resources se controlled by the United States held in trust by, appertaining to, or oth belonging to, manager the fishery conservation zone establish y the Magnuson-Stevens Fishery (including the resource Conservation and Management Act (16 U.S.C. 1801 et seq.)), any state or local government, any foreign government, any Indian tribe, or, if such resources are subject to a trust restriction on alienation, any member of an Indian tribe.
- Z. Newmark Operable Unit shall have the same meaning as in the Consent Decree.
- BB. O&M Escrow Account shall have the same meaning as in the Consent Decree.
- CC. Oversight Costs shall have the same meaning as in the Consent Decree.
- DD. Policy Period the period set forth in Item 2 of the Declarations, or any shorter period arising as a result of cancellation of this Policy.
- Pollution Conditions means the discharge, dispersal, release or escape of any solid, liquid, gaseous or EE. thermal irritant or contaminant, including, but not limited to, smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, medical waste and waste materials into or upon land, or any structure on land, the atmosphere or any watercourse or body of water, including groundwater, provided such conditions are not naturally present in the environment in the amounts or concentrations discovered which are required to be addressed pursuant to the Consent Decree. Pollution Conditions shall not include Microbial Matter.
- FF. Professional Services means those architectural, engineering, consulting, project management or construction management services that are performed for a fee by the Named Insured or the Supervising Contractor.
- GG. Property Damage means:
  - 1. physical injury to or destruction of tangible property of parties other than the Insured, including the resulting loss of use and diminution in value thereof;
  - 2. Loss of use, but not diminution in value, of tangible property of parties other than the Insured that has not been physically injured or destroyed;

Property Damage does not include Clean-Up Costs.

- HH. Proportionate Production Costs shall mean the amount calculated as follows: On a retrospective annual basis, corresponding to the Named insured's fiscal year, the Named Insured shall calculate the proportion that its production costs bore to reimbursable Clean-Up Costs paid under this Policy for the volume of water sold to other water agencies in the prior fiscal year and;
  - 1) If revenue from such sales on an annual basis is sufficient to cover, for this volume of water, both the Clean-up Costs reimbursable under this policy and the Named Insured's unreimbursable production costs, then the Proportionate Production Costs shall be calculated as all production costs (including but not limited to boosting costs) incurred in connection with the volume of water sold.
    - 2) If revenue from such sales on an annual basis is insufficient to cover, for this volume of water, both the Clean-up Costs reimbursable under this policy and the Named Insured's unreimbursable production costs (including but not limited to boosting costs), then the Proportionate Production

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Costs shall be calculated as the proportion production costs bore to reimbursable Clean-Up Costs paid under this Policy for the volume of water sold transfer water agencies in the prior fiscal year.

- II. Responsible Insured means the General Manager and Deputy General Manager of the City of San Bernardino Municipal Water Department.
- JJ. Restoration Costs means reasonable and necessary costs incurred by the Insured with the Company's written consent, which consent shall not be unreasonably withheld or delayed, to repair, replace or restore real or personal property to substantially the same condition it was in prior to being damaged during work performed in the course of incurring Clean-Up Costs. However, such Restoration Costs shall not exceed the net present value of such property prior to incurring Clean-Up Costs. Restoration Costs do not include costs associated with improvements or betterments.
- KK. Statement of Work shall mean the Statement of Work developed in accordance with and made part of the Consent Decree.
- LL. Supervising Contractor means the contractor approved by the Company and scheduled on the Definition of Scheduled Contractor Endorsement or, in the event the Named Insured is EPA or DTSC, any contractor performing Clean-Up.
- MM. Support Oversight Agency shall have the same meaning as in the Consent Decree.
- NN. Termination Date means, with respect to Coverages B:
  - (a) The ending date of the period set forth in Item 2 of the Declarations;
  - (b) The date the Limit of Liability shown in Item 3 of the Declarations is exhausted;
  - (c) The date the **Insured** receives written confirmation of final **Certification or Notification of Completion**; or
  - (d) Cancellation of the Policy pursuant to Section VI., Paragraph G.

The Termination Date shall not be extended by the exercise of any rights held by the Lead **Oversight Agency** or any other governmental entity or quasi-governmental entity to reopen, reconsider or otherwise cause the **Insured** to perform **Clean-Up** after the Insured has received notification of final Certification or Notification of Completion.

- OO. Treatment Waste Transportation means the transportation of waste materials from the Muscoy Operable Unit and Newmark Operable Unit generated at those operable units in the course of satisfying the Consent Decree which are transported by a third party licensed to transport such waste materials from the Muscoy Operable Unit and Newmark Operable Unit, including the loading and offloading of such waste.
- PP. Water Sales Recoveries. As provided in section III.B.2.c), pp. 18-19 of the Statement of Work and paragraph 17.c.2 of the Consent Decree, shall mean annual water sales revenues generated by the Named Insured over its fiscal year for sales to other water agencies as a result of operations of facilities that are the subject of the Consent Decree after deduction of the Proportionate Production Costs incurred by the Named Insured.

IN WITNESS WHEREOF, the Company has caused this Policy to be signed by its president and secretary and signed on the Declarations page by a duly authorized representative or couptorsigned in states where applicable.

Elizabeth M. Tuck, Secretary

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# Chapter 13.25 SPREADING OR EXTRACTION WITHIN THE MANAGEMENT ZONE

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#### 13.25.010 Purpose.

The purpose of this Chapter is to assure that activities occurring in the Management Zone, including but not limited to development, digging, drilling, boring or reconstruction of wells, extraction of groundwater from wells and spreading of water do not interfere with or cause pass through of contaminants from the Newmark and Muscoy Operable Units. Activities undertaken in the Management Zone shall not cause or contribute to the migration of groundwater contaminants from the Newmark and Muscoy Operable Units to uncontaminated areas.

It is the further purpose of this chapter to assure the protection of human health and the environment, and compliance with relevant Federal and State requirements directly associated with the performance of the remedy.

It is the further purpose of this chapter to manage the spreading of water within the Management Zone and manage the development, digging, drilling, boring, reconstruction of wells, and extraction of groundwater from wells, to assure compliance with the remedial program set forth in the RODs, Consent Decree and Statement of Work, as defined below and aid in the eventual restoration of the aquifer to beneficial use.

It is the further intent of this Chapter to regulate activities within the Management Zone only to the extent necessary to achieve the purposes set forth and to minimize the regulatory impacts to those intending to spread water or develop groundwater resources in the Management Zone.

In addition to any other requirements of Chapter 13.25, the following requirements shall apply to the Management Zone. Nothing contained herein shall exclude compliance with the other provisions of Chapter 13.25. In the event of any conflict between the provisions of this Chapter 13.25 and any other Chapter, the terms and provisions of this Chapter shall apply.

# 13.25.015 Background Pertaining to Newmark Groundwater Contamination Superfund Site.

#### Background.

A. In 1980 the State of California performed sampling of certain wells belonging to the City of San Bernardino Municipal Water Department ("SBMWD"). These samples disclosed the presence of various contaminants, including trichloroethylene (TCE) and perchloroethylene (PCE).

B. Pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 USC 9605, the United States Environmental Protection Agency ("EPA") placed the Newmark Groundwater Contamination Superfund Site ("Site") on

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the National Priorities List ("NPL"), as set forth in 40 CFR Part 300, Appendix B, by publication in the Federal Register on March 31, 1989, 54 Fed. Reg. 13296, 13301.

C. In late 1990, EPA commenced a Remedial Investigation ("RI") focusing on the Newmark  $\frac{2}{\sqrt{2}}$ Operable Unit ("OU"). In September 1992, EPA expanded the RI to include the Muscoy OU.

D. In March 1993, EPA published notice of the completion of the Feasibility Study ("FS") and the Proposed Plan for interim remedial action pertaining to the Newmark OU. In December 1994, EPA published notice of the completion of the FS and Proposed Plan for interim remedial action pertaining to the Muscoy OU.

E. EPA's determination concerning the interim remedial actions to be implemented at the Site are set forth in the Newmark OU Record of Decision ("ROD"), signed August 4, 1993, and Muscoy ROD signed March 24 1995 and the Explanation of Significant Differences (ESD) signed on \_\_\_\_\_\_, 2004.

F. On September 18, 1995, EPA, the State of California and SBMWD entered into a Cooperative Agreement providing, in part, for SBMWD to perform the operation and maintenance (O&M) of the remedial action set forth in the RODs, and for EPA to fund the O&M.

G. In September 1996, the SBMWD commenced an action against the United States Army pursuant to Section 107 and 113 of CERCLA seeking to obtain its costs for response and the operation and maintenance of the Newmark and Muscoy OUs.

H. Commencing in June 2000, SBMWD, State of California Department of Toxic Substance Control ("DTSC") and EPA commenced negotiations to resolve various issues relating to Site OU, Newmark OU and Muscoy OU. On \_\_\_\_\_\_, the Consent Decree memorializing the settlement was entered by the Court.

I. The Consent Decree requires, in part, for the City of San Bernardino (City)to implement an ordinance providing for protection and management of the Interim Remedy set forth in the RODs and ESD and specifically for the City to regulate the spreading and extraction of water from the Bunker Hill Basin within the City in order to prevent or correct spreading practices or extraction operations that could interfere with or interrupt or degrade the performance of the Interim Remedy.

J. The protection of groundwater resources within the City is of utmost importance to the City and SBMWD. The public health, safety and general welfare of the people of the State of California and of the more than 600,000 residents of the Counties of San Bernardino and Riverside who depend upon the continued availability of potable groundwater from the Bunker Hill Basin is paramount. The public health, safety and general welfare of the people of the State of California and the residents of the City of San Bernardino require assurance that spreading of water and extraction of groundwater do not interrupt or interfere with the construction, operation and maintenance of the Interim Remedy or degrade the performance of the Interim Remedy.

K. The Interim Remedy requires, in part, the extraction of contaminated groundwater from the Bunker Hill Water Basin, and within the Newmark and Muscoy OUs, and treatment of the

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groundwater to meet all State and federal permits and requirements for drinking water and delivery of treated water to SBMWD for distribution to the public through its potable water system, or in the alternative, to for recharge to the aquifer.

L. Inhibitor wells extract groundwater. The inhibitor wells are located at the downgradient in the downgradient in the management Zone. The inhibitor wells currently in place were designed to function based upon hydrological factors relating to the flow of water through the basin. The rate of flow through the basin may increase when additional spreading occurs at spreading basins located upgradient from the inhibitor wells. Another factor affecting flow rate is the amount of water flowing through the basin and either extracted or flowing out of the basin. When extraction of groundwater occurs downgradient or to the side of Management Zone, or the capacity of existing downgradient or adjacent wells are increased, the rate of flow may increase. Should an increase in the flow of water occur beyond the capacity of the inhibitor wells, the inhibitor wells may not be able to contain and extract the additional contaminated water before it enters the aquifer downgradient from the inhibitor wells.

M. As required by the Consent Decree, the City must exercise its police power to protect the public welfare of the City by adopting reasonable regulatory measures.

## 13.25.020 Definitions.

- A. "Applicant": The person or entity submitting the application addressed in this chapter. The term "Applicant" shall also include the person or entity granted any permit or permission pursuant to the terms of this chapter, and shall also include all licensees, lessees, agents, contractors, operators, employees, officers, directors, representatives, attorneys, successors, assigns, heirs and other persons or entities exercising the rights of the permit through applicant.
- B. "Aquifer": A geologic formation that stores, transmits and yields significant quantities of water to wells and springs.
- C. "Barrier well": See "Inhibitor well" below.
- D. "Basin": The Bunker Hill Basin.
- E. "City": The City of San Bernardino.
- F. "Code": The San Bernardino Municipal Code.
- G. "Contamination" means any impairment in the quality of water of the City by wastes or other degrading elements in amounts or concentrations violating any federal or state drinking water standard or applicable permit limit for the water produced by the Interim Remedy, or otherwise.
- H. "Day" means a calendar day.
- I. "Department" means the San Bernardino Municipal Water Department.

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- J. "DOHS": State of California Department of Health Services.
- K. "DTSC": State of California Department of Toxic Substance Control.
- L. "EPA": The United States Environmental Protection Agency.
- M. "Extraction": The process of taking water from the groundwater aquifer by way of wells and other appurtenances.
- N. "FS": The Feasibility Studies performed by EPA for the Site and completed in ,1992 and December 1994.
- O. "General Manager" means the San Bernardino Municipal Water Department General Manager or designee.
- P. "Groundwater": All water beneath the surface of the earth within the zone below the water table in which the soil is saturated with water.
- Q. "Inhibitor Well": The wells designed by EPA for the extraction of water from specific areas of the basin and identified in the RODs.
- R. "Management Zone": The geographic area depicted and defined on Exhibit "A" and Exhibit "B", on file in the office of the General Manager of SBMWD.
- S. "Model" means the mathematical calculations required to be produced pursuant to the Consent Decree and SOW addressing the physical characteristics of the groundwater in the Bunker Hill Basin under various conditions.
- T. "NPL": National Priorities List.
- U. "OU": Operable Unit.

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- V. "Person": Any state or local government agency, private corporation, firm, partnership, individual, group of individuals, organization, association, or to the extent authorized by law, any federal agency.
- W. "RI": The Remedial Investigations performed at the Site for the Newmark Operable Unit and the Muscoy Operable Unit.
- X. "Record of Decision" or "ROD": The Records of Decision prepared by EPA for the Site setting forth the provisions of the Interim Remedy to be implemented in addressing the contamination identified in RI/FS.
- Y. "Remedy" or "Interim Remedy": The course of action set forth in the RODs, Statement of Work (SOW), and Consent Decree (CD) relating to the operation and maintenance of the remedial action specified in said documents.
- Z. "RODs": The Record of Decision for the Newmark Operable Unit signed August 4, 1993 and the Record of Decision for the Muscoy Operable Unit signed March 24, 1995.





- AA. "SBMWD": The San Bernardino Municipal Water Department.
- BB: "Site": The Newmark Groundwater Contamination site identified in 40 CFR Part 3rd Appendix B, published in the Federal Register on March 31, 1989, 54 Fed.Reg. 13296, 24 13301.
- CC. "Spreading Basin": Areas, facilities and portions of land set aside for the deposit of water with the intent to allow the water to percolate into the groundwater basin, as depicted on Exhibit "C", attached hereto and incorporated by this reference and on file in the office of the General Manager of SBMWD.
- DD. "Statement of Work" (SOW): The document incorporated into the Consent Decree, referenced in Section 13.25.015 H., setting forth the implementation of the remedial action to be performed by SBMWD, EPA and DTSC relating to the Newmark OU and Muscoy OU.
- EE. "Well" or "water well" means any artificial excavation constructed by any method for the purpose of extracting water from, or injecting water into the ground. This definition shall not include:
  - 1. Oil or gas wells, or geothermal wells constructed under the jurisdiction of the California State Department of Conservation, except those wells converted to use as water wells; or
  - 2. Wells used for the purpose of:
    - a. Dewatering excavation during construction, or
    - b. Stabilizing hillsides or earth embankments.

# 13.25.025 Permits.

A. <u>Spreading</u>. Unless a permit issued by SBMWD pursuant to this Chapter is first obtained, it shall be unlawful for any person, as principal, agent or employee, to spread water within the Management Zone.

B. <u>Groundwater Extraction</u>. Unless a permit issued by SBMWD pursuant to this Chapter is first obtained, it shall be unlawful for any person to develop, dig, drill, re-equip or reconstruct a well, or to operate an existing well at an extraction rate or volume above the 2002 rated capacity of that well, or to allow the development, digging, drilling, re-equipping or reconstruction of a well on land located within the Management Zone.

If repairs to existing wells, including the replacement of an existing motor or bowl assemblies, do not increase the rated capacity of the well above the rated capacity as it existed in the year 2002, such repairs shall not require a permit, but notice of such activity shall be given at least ten (10) days in advance to SBMWD, unless emergency conditions require a faster response, in which case notice shall be given to SBMWD as soon as practical. C. <u>Application for Permit</u>. An application for a permit shall be filed by the landowner or Applicant with the SBMWD on a form provided by SBMWD. Applicant has an affirmative duty to provide accurate representations of all material facts in the application.
 D. <u>Contents of Application for Permit for Extraction</u>. The contents of the Application for Conten

D. <u>Contents of Application for Permit for Extraction</u>. The contents of the Application for  $\bigcup_{i=1}^{e_1}$  Permit for Extraction shall include, as a minimum, all of the items set forth in Section 13.24.250  $\bigoplus_{i=1}^{e_1}$  and the elevations of proposed screening intervals, and such other information as SBMWD determines necessary and appropriate to evaluate the application and assure that the proposed extraction will not interfere with, compromise, endanger or detrimentally affect the Interim Remedy or otherwise cause or contribute to the movement of contaminants to areas downgradient of the Inhibitor Wells.

E. <u>Contents of Application for Permit for Spreading</u>. The contents of the Application for Permit for Spreading shall include, as a minimum, the name of the person proposing to conduct the spreading, the time period over which the spreading is proposed to occur, the volume, location and such other information as SBMWD may determine necessary and appropriate to evaluate the application and assure the proposed spreading will not interfere with, compromise, endanger or detrimentally affect the Interim Remedy or otherwise cause or contribute to the movement of contaminants to areas downgradient of the Inhibitor Wells.

F. <u>Fees</u>. SBMWD may levy a fee for review of the Application for Permit and monitoring of compliance with the permit. The fee shall be established by resolution of the SBMWD Board of Water Commissioners.

## G. <u>Review of Application</u>.

- 1. The review process of the application will commence when SBMWD determines it has received from the Applicant all documents and necessary information to commence its review.
- 2. Subject to timely participation by EPA and DTSC, SBMWD shall endeavor to complete the review within One Hundred Twenty (120) days from Notice by SBMWD to Applicant that the application is deemed complete.
- 3. The completed application shall be subject to review and comment by the EPA and DTSC. SBMWD shall provide to EPA and DTSC a copy of its proposed decision, after which EPA and DTSC, pursuant to the Consent Decree, shall have a minimum of thirty (30) days to comment on the proposed decision. If either EPA or DTSC object in writing to the permit application, proposed decision or modeling work on which a proposed permit decision is based, the SBMWD, EPA and DTSC, shall consult for up to sixty (60) days in order to resolve any material differences among them over such matters. Consistent with the Consent Decree, the SBMWD shall not issue a permit over the unresolved objections of either EPA or DTSC.





#### 13.25.035 Approval of Permits.

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A. <u>Standard of Review</u>. A permit may be granted for a period of three years with or without conditions under the provisions of this chapter only if the Applicant demonstrates that the proposed extraction or spreading and method of operation will not interfere with, compromise, endanger or detrimentally affect the Interim Remedy, or cause the City to be in potential violation or non-conformance with the SOW, Consent Decree or RODs, or EPA or DTSC approved plans adopted thereunder.

- 1. Prior to the completion of an updated Model the Applicant shall bear the burden of demonstrating through the use of engineering and other satisfactory scientific data that the proposed extraction or spreading will not interfere with, compromise, endanger or detrimentally affect the Interim Remedy.
- 2. After an updated Model has been completed, the Applicant shall bear the burden of demonstrating through the use of the Model and other satisfactory scientific evidence that the proposed extraction or spreading will not interfere with, compromise, endanger or detrimentally affect the Interim Remedy.

#### B. <u>Conditions of Approval</u>.

- 1. In the event the application is approved, EPA, DTSC and SBMWD shall have the right to condition approval upon mitigation or remedial activities to be performed by Applicant. EPA, DTSC or SBMWD may require Applicant to prepare a mitigation or remedial plan subject to approval by EPA, DTSC and SBMWD prior to issuance of the permit.
- 2. If mitigation or remedial activities are required as a condition of the issuance of a permit, SBMWD may require Applicant to post a bond of sufficient value to assure compliance with the mitigation or remedial activities.
- 3. Upon approval of the application, with or without mitigation or remedial activities, and after the posting of a bond, if required, SBMWD shall issue a permit.
- 4. The approval and issuance of a permit shall be subject at all times to the monitoring of Applicant's activities and suspension or revocation of the permit if it is determined by SBMWD, EPA or DTSC that Applicant's activities interfere with, compromise, endanger or detrimentally affect the Interim Remedy.
- 5. The issuance of a permit shall be conditioned on the grant to EPA, DTSC and the City, including SBMWD, their contractors and representatives, of access to the wells or spreading basins or related areas for the purpose of verifying compliance with the permit, and upon reasonable notice to inspect and copy documents and records of Applicant's operations of the permitted facilities.





6. Insurance.

a. As a condition of the issuance of a permit, Applicant shall provide to  $\frac{1}{22}$  SBMWD a certificate of insurance naming SBMWD, the City of San Bernardino,  $\frac{1}{22}$  EPA and DTSC as additional insured for pollution, contamination and general  $\frac{1}{22}$  liability in an amount of not less than Twenty Five Million Dollars (\$25,000,000.00).

b. Applicant shall cause to be provided To SBMWD, EPA and DTSC at least thirty days written notice from any carrier proposing a change in the terms or conditions of the insurance, including any changes in coverage, amounts of coverage or cancellation of insurance. The failure to have insurance in effect shall automatically terminate the permit.

7. Misrepresentation or failure to disclose material facts in the application.

C. <u>Denial of Application</u>. SBMWD shall deny the application if it determines that the standards of this Chapter have not been attained or if either SBMWD, EPA or DTSC determines that the proposed project will interfere with, compromise, endanger or detrimentally affect the Interim Remedy, or cause the City to be in potential violation or non-conformance with the SOW, Consent Decree or RODs, or any plan approved by EPA or DTSC in order to implement those documents. SBMWD shall provide to Applicant a copy of the written objections made together with any additional written statement of reasons by EPA, DTSC and/or SBMWD for disapproval of the permit. An Applicant denied a permit may appeal the decision pursuant to Section 13.25.055.

## 13.25.040 Reporting

A condition of each and every permit shall be the requirement that the Applicant provide, at least quarterly, regular written reports to SBMWD of water levels, chemistry and other information affecting water quality deemed appropriate by SBMWD. The SBMWD may specify forms for such reports and such forms shall be used by Applicant to comply with the provisions of this section. Such reports shall require Applicant to perform monitoring, sampling and record keeping of any wells that are the subject of the permit, including the amount, rate and timing of extraction or spreading and the quality of water being extracted or spread, including, but not limited to, concentrations of perchloroethylene (PCE), Trichloroethylene (TCE), freon and other water quality related concentrations specified by SBMWD. Upon receipt of any report requested or required by this chapter, SBMWD may require a follow-up report of additional data and/or information.

Applicant shall keep records of all activities relating to the operation of wells and/or spreading activities, including all sampling results and flow data. Such records shall be available for inspection and copying by SBMWD, EPA and DTSC upon forty eight (48) hours notice. These records shall be maintained for a period of not less than five (5) years. The period for retention of records shall automatically be extended for any period of litigation between SBMWD, the City of San Bernardino, EPA and/or DTSC and Applicant.





#### 13.25.045 Revocation.

A. If there is an immediate and serious threat to the Interim Remedy, and its performance in accordance with the SOW, Consent Decree or RODs, and if SBMWD believes it may be due in whole or in part to Applicant's operations, SBMWD may order Applicant to cease or reduce its operations and show cause why the permit should not be revoked, modified or restricted.

B. In addition to the provisions set forth above, the permit may be revoked upon the determination of the SBMWD General Manager of any of the following:

- 1. Misrepresentation or failure to disclose material facts in the application.
- 2. Falsifying or making misrepresentations on any reports submitted to SBMWD, whether as part of the application, as a condition of the permit or as submitted voluntarily by the Applicant.
- 3. Tampering with monitoring equipment subject to the permit.
- 4. Refusing or obstructing SBMWD or its designee, or EPA or DTSC, or their designees timely access to the permitted sites and operations, and records of those operations.
- 5. Failure to pay fines.
- 6. Failure to meet compliance schedules.
- 7. Failure to file timely reports or to respond to requests for reports, sampling data, monitoring activities or cooperation with the Interim Remedy for the Newmark Superfund Site.
- 8. A material change of conditions.

C. In the event the activities of the Applicant, or Applicant's agents, contractors, licensees, lessees or employees are deemed by SBMWD to interfere with, compromise, endanger or detrimentally affect the Interim Remedy, SBMWD may revoke or suspend the permit and compel Applicant to cease all activities covered by the permit until either a hearing is held before the Board of Water Commissioners pursuant to Section 13.025.060 below for Applicant to demonstrate why the permit should not be modified or revoked, or Applicant and the General Manager reach a mutually acceptable resolution. In all other circumstances, Applicant shall be advised in writing of any non-compliance with the permit or other condition that may warrant a modification of permit conditions or revocation of the permit, and Applicant shall be afforded the opportunity for a hearing before the Board of Water Commissioners pursuant to the provisions of Subparagraph F below to present any evidence as to why the permit should not be modified or revoked.

## 13.025.050 Consent Orders

3

The SBMWD may enter into consent orders, assurances of voluntary compliance, or similar arrangements establishing an agreement with any Applicant responsible for noncompliance. Such arrangement will include specific action to be taken by the applicant to correct any non-compliance and shall be enforceable in a court of competent jurisdiction.

# 13.025.055. Cease and Desist Orders

If SBMWD finds that an Applicant has violated any provision of this chapter, or the permit, or the Applicant's activities pose an immediate and serious threat to the Interim Remedy, and that it is likely the Applicant will continue with such violation or detrimental activities, SBMWD may issue an administrative order to the Applicant to cease and desist and take all necessary and immediate action to comply. If Applicant fails to comply with such administrative orders Applicant shall be subject to additional criminal and civil liability in addition to any civil liability applicant may be liable for prior to the cease and desist order.

# **13.25.060** Hearing Procedures and Appeals.

- 1. In the event SBMWD denies an application, imposes or materially modifies a condition of approval that is/are unacceptable to Applicant, or suspends or revokes a permit, an appeal may be commenced by Applicant.
- 2. All appeals must be filed in the office of the SBMWD General Manager within fifteen (15) days of any denial, approval with conditions, suspension or revocation. The Appeal filed with SBMWD shall include the name of the Applicant, name, address and telephone number of the person representing applicant, Assessor's Parcel Number (APN) or other description of property involved, any identifying case number or application number issued by SBMWD; the basis for the appeal, the date and signature of the Applicant.
- 3. All appeals shall be heard by the SBMWD Board of Water Commissioners during their regular meetings. The burden of proof at such hearing shall be upon the Applicant. Following the hearing the Board of Water Commissioners shall issue its decision. Said decision shall be deemed a final administrative decision. Upon rendition of any adjudicatory administrative decision by the SBMWD Board of Water Commissioners, notice shall be given to the parties that the time within which judicial review must be sought is governed by the provisions of Section 1094.6 of the California Code of Civil Procedure
- 4. Any issue relating to the Consent Decree or SOW may, at the discretion of the SBMWD, be adjudicated in the United States District Court for the Central District of California, including the right of the SBMWD to remove any action initially brought in a California trial court.



# 13.25.070 Violations, Remedies and Penalties.

- 1. Any person violating any provision of this chapter or any condition of a permit shall be guilty of a misdemeanor, punishable by a fine not exceeding \$5,000.00 per violation, and/or by imprisonment not exceeding six months for each violation. Each day a violation occurs shall be deemed a separate violation.
- 2. Not withstanding anything to the contrary contained herein, and in addition to any other penalties, fines or other action, the SBMWD Board of Water Commissioners may order the payment of damages and civil penalties not to exceed \$10,000.00 per day and actual damages for any violation of any provision of this chapter. Said penalties shall be deemed to be civil penalties and may be imposed in addition to any criminal penalties.
- 3. In the event of any violation of any provision of this section, and in addition to any other remedies, at the sole and exclusive discretion of SBMWD, the permit may be revoked.
- 4. A violation of any provision of this ordinance or any permit provision or condition shall be deemed to be a public nuisance.

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# NEWMARK GROUNDWATER CONTAMINATION SUPERFUND SITE San Bernardino, CA

#### EXPLANATION OF SIGNIFICANT DIFFERENCES

to 1993 and 1995 Interim Records of Decision: Newmark and Muscoy Operable Units

2004

#### 1. INTRODUCTION

In September 1993 and 1995, the United States Environmental Protection Agency ("EPA") issued two Interim Records of Decision ("RODs") addressing contamination at two groundwater operable units ("OU") of the Newmark Groundwater Contamination Superfund Site in the City of San Bernardino, California ("the City"). The Newmark ROD, executed on August 4, 1993, requires extraction of contaminated groundwater from the Newmark OU, treatment of the contaminated groundwater to meet the ROD treatment goals, and delivery of the treated groundwater to the City for distribution to the public through its potable water supply system, or the water will be recharged to the aquifer. The Muscoy ROD, which set similar requirements, was executed on March 24, 1995.

EPA is issuing this Explanation of Significant Differences ("ESD") to provide notice of modifications to the 1993 and 1995 Interim RODs, which do not fundamentally affect the selected interim remedial actions. The purpose of the ESD is to supplement the existing RODs with an Institutional Control ("IC") program to assure that the Newmark and Muscoy extraction and treatment systems remain effective in meeting the objectives of capturing contaminated groundwater and inhibiting the migration of groundwater contamination into clean portions of the aquifer. The ICs to be implemented under this ESD are to protect and enhance the barrier

well system established pursuant to the Newmark and Muscoy RODs, and are an essential and integral component of the interim remedies for the Newmark and Muscoy OUs. The ESD requires a groundwater management program mandating that the installation of new wells, or operation of spreading basins that might impact the barrier wells, be conducted pursuant to a permit or other control mechanism. In settlement negotiations with the City, which accepts the treated water from both OUs into its potable water supply, the City has offered to adopt an ordinance or other groundwater management plan that will implement the requirements of this ESD within the City limits.

**CHANNED** 

EPA is issuing this Explanation of Significant Differences to satisfy its responsibilities under CERCLA Section 117(c) and NCP Section 300.435(c)(2)(i). This ESD and any comments regarding this ESD will become part of the Administrative Record for this site pursuant to NCP Section 300.825(a)(2). Copies of the Administrative Record are available for review at the following locations:

The San Bernardino County Public Library 104 W. Fourth Street San Bernardino, CA 92415 (909) 387-5718

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San Bernardino Valley Municipal Water District Office 1350 S. "E" Street San Bernardino, CA 92412 (909) 387-9211

EPA Region 9 Superfund Records Center 95 Hawthorne Street - Suite 403S San Francisco, California 94105 (415) 536-2000

If additional information becomes available, EPA will revise the Administrative Record to reflect such material.

**NUACO** 

## II BACKGROUND

The Newmark Groundwater Contamination Superfund Site includes three OUs: the Newmark and Muscoy OUs are located within the San Bernardino portion of the Bunker Hill Basin, near the Shandin Hills, and the Source OU is generally located in the area northwest of the Shandin Hills (see site map in Figure 1, page 9). The Newmark Groundwater Contamination Superfund Site covers approximately eight square miles of groundwater contaminated with volatile organic compounds ("VOCs"), including perchloroethylene ("PCE") and trichloroethylene ("TCE"). These chemicals are industrial solvents that have been commonly used for a variety of purposes including dry cleaning, metal plating and machinery degreasing.

The following provides a brief background of the Newmark Groundwater Contamination Superfund Site and the 1993 and 1995 Interim RODs. Additional background information can be found in the 1993 and 1995 Interim RODs and corresponding Administrative Records.

# B. <u>Site Background and Description</u>

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In the 1980's, the State of California sampled water produced from certain City wells and detected contamination from VOCs, including PCE and TCE, freon, decomposition byproducts from those compounds, and other contaminants. The State investigations were published in 1986 and 1989, and identified the Newmark and Muscoy contamination plumes.

The California Department of Toxic Substances Control ("DTSC") and the Santa Ana Regional Water Quality Control Board ("RWQCB") found that the Newmark and Muscoy plumes constituted an ongoing release of hazardous substances and an emergency threatening





public health and the environment. DTSC made these findings in a determination issued by put a DTSC during the 1980's, pursuant to California law. A star figur to a greater to the at four treatment systems consisting of air stripping and liquid granular activated carbon units located at the Newmark wellfield and elsewhere, and DTSC and its assigned remedial project manager directed and oversaw the City's work on the design, construction, operation and maintenance of those treatment systems. DTSC paid for the design and construction of these four treatment systems and appurtenant facilities at the Newmark wellfield. The City has paid for, and continues to pay for, the operation and maintenance of these treatment systems, and the City paid for and constructed appurtenant storage and distribution facilities needed to accommodate these treatment systems. A this takes a second tor ii . . . " one on EPA placed the Newmark Groundwater Contamination Superfund Site on the National Priorities List ("NPL") in March 1989. In 1990, EPA began the Remedial Investigation ("RI") and the Feasibility Study ("FS") of the Newmark OU. For the Newmark RI, monitoring wells were drilled and sampled in the Newmark OU, and nearby City and State wells were also sampled by EPA. PCE and TCE were found in all of the affected wells. The FS evaluated a range of cleanup alternatives for addressing the five-mile long groundwater contamination plume. The RI/FS report for the Newmark OU was finalized in March 1993. . On August 4, 1993, EPA issued a ROD that identified the methods that EPA would use to contain and clean up the Newmark OU groundwater contamination. The remedy for the Newmark plume is an interim remedial action which addresses the potential public health threats from the groundwater contamination. It consists of the following features: (1) groundwater



extraction (pumping) and treatment facilities at two locations in the aquifer (the North and South Areas); (2) removal of contaminants from groundwater using liquid phase granular activated carbon filtration; and (3) the final use of treated water. Construction of the Newmark OU extraction and treatment system was completed in October, 1998, and was determined to be operational and functional in October 2000.

Additional investigation in the summer of 1992 traced the direction of the groundwater contamination flow into the western side of the Shandin Hills. Based on this information, the Newmark Groundwater Contamination Superfund Site was officially expanded in September 1992 to include the Muscoy groundwater plume, located west of the Shandin Hills, as the Muscoy OU.

EPA completed the RI/FS of possible treatment alternatives for the Muscoy groundwater contamination, and the RI/FS report for the Muscoy OU was issued in December 1994. The Muscoy OU ROD was signed on March 24, 1995. The ROD for the Muscoy groundwater contamination selects an interim remedial action focusing on preventing contamination from spreading to clean parts of the aquifer south and west of the Shandin Hills. Much of the analysis for selecting a cleanup plan for the Newmark groundwater contamination was directly applicable to the Muscoy plume. Construction of the Muscoy OU extraction and treatment system is anticipated to be completed in 2004, and the performance evaluation of the system is anticipated to be completed in 2005.

The U.S. EPA's primary objective for the 1993 and 1995 Interim RODs for the Newmark and Muscoy OUs is to withdraw, treat and dispose of contaminated groundwater, and inhibit any further spread of contamination to clean areas of the aquifer. This is being

accomplished for the Newmark and Muscoy OUs by the completion of the construction and operation of the water treatment plants and the barrier wells located along 11<sup>th</sup> and 14<sup>th</sup> Streets in San Bernardino, which are expected to remove 21,000 pounds of contaminants over the next 50 years.

The Source OU RI/FS is still being conducted with the participation of the United States Army Corps of Engineers. A ROD for the Source OU will be issued after completion of the RI/FS.

#### III. DESCRIPTION OF ESD

This ESD includes a modification to both the 1993 and 1995 Interim RODs for the Newmark and Muscoy OUs to require ICs within the City limits as a long term groundwater management strategy to protect the interim remedies, and to address exposure to hazardous wastes and constituents. The ICs to be imposed pursuant to the ESD are to protect the function and effectiveness of the barrier well system established pursuant to the Newmark and Muscoy RODs, and are an essential and integral component of the long term management of the interim remedies for the Newmark and Muscoy OUs. This ESD requires the implementation of a groundwater management program that will control and monitor the ability of users to extract or spread water in the area of influence to the barrier well system. In accordance with the ESD, the City has indicated that it will adopt an ordinance or otherwise implement a management program mandating that the installation of new wells, re-equipping of existing wells, expansion of capacity or rate of production of existing wells, or the use of spreading basins that might impact the barrier wells be conducted only pursuant to a permit, and that the applicant for any such permit demonstrate that its operations will not detrimentally impact the remedy.

## IV. SUPPORT AGENCY COMMENTS

EPA has provided State and Municipal Agencies (including DTSC, and the City of San Bernardino) an opportunity to review and comment on these changes to the 1993 and 1995 RODs. Both DTSC and the City agree that the ICs described in this ESD are appropriate.

## V. STATUTORY DETERMINATIONS

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This ESD requires an institutional control program to support the interim remedial actions, which affects the scope of the two Interim RODs by adding an additional protective measure to the interim remedial actions, and is significant. Because the institutional control program does not otherwise affect the scope, performance or cost of the selected interim remedial actions, the change is not fundamental. The selected interim remedial actions in the two Interim RODs remain otherwise unchanged, and will continue to meet all Applicable or Relevant and Appropriate Requirements ("ARARs") described in the Interim RODs and to be protective of human health and the environment. The interim remedial actions will continue to be cost effective.

#### VI. PUBLIC PARTICIPATION ACTIVITIES

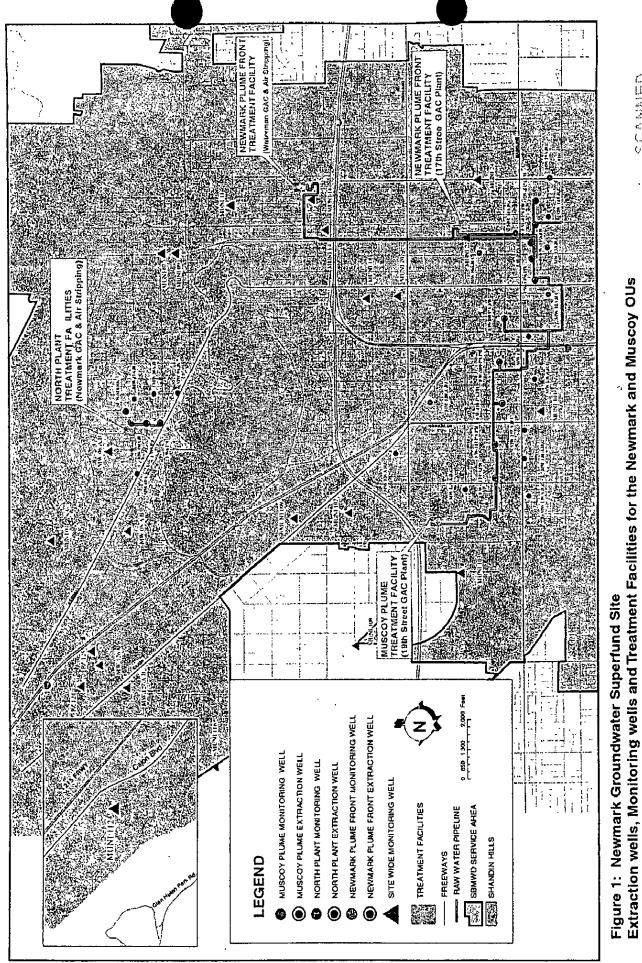
Pursuant to 40 C.F.R. § 300.435(c)(2)(i), a formal public comment period is not required for an ESD to a ROD when the difference does not fundamentally alter the interim remedial actions with respect to scope, performance or cost. This ESD does not propose a fundamental change to the interim remedies in the 1993 and 1995 Interim RODs with respect to scope, performance or cost, and therefore, no formal public comment period is required. Nonetheless, EPA will make this ESD and supporting information available for public review and comment through the Administrative Record and information repository for the Newmark Groundwater Contamination Superfund Site.

Additionally, EPA will publish in the following San Bernardino County newspapers of general circulation a notice that briefly summarizes the ESD, including the reasons for such differences, and that announces its availability for public review and comment: The Sun, The Press Enterprise, Black Voice, El Chicano, Precinct Reporter and Westside Story Newspaper. The comment period will close forty-five (45) days after publication. Thereafter, EPA will consider the comments and will determine whether any revisions to the ESD are needed.

Elizabeth Adams, Chief Superfund Site Cleanup Branch EPA Region 9

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ST 9,2004



SCANNED

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LOIS J. SCHIFFER 1 Assistant Attorney General 2 SYLVIA QUAST Trial Attorney 3 U.S. Department of Justice Environment and Natural Resources 4 Division Environmental Defense Section 5 P.O. Box 23986 Washington, D.C. 20026-3986 6 Telephone: (202) 514-1806 Fax: (202) 616-2426 7 NORA M. MANELLA 8 United States Attorney 9 LEON W. WEIDMAN Assistant United States Attorney Chief, Civil Division 10 LAWRENCE KOLE Assistant United States Attorney 11 12 Room 7516 Federal Building 300 North Los Angeles Street Los Angeles, CA 90012 13 Telephone: (213) 894-3996 14 Attorneys for Federal Defendant 15 IN THE UNITED STATES DISTRICT COURT 16 FOR THE CENTRAL DISTRICT OF CALIFORNIA 17 WESTERN DIVISION 18 STATE OF CALIFORNIA, on behalf of 19 the California Department of Toxic ) Substances Control, 20 No. CIV. 96-5205 MRP(JGx) Plaintiff. 21 vs. 22 STIPULATION AND PROPOSED UNITED STATES OF AMERICA. PROTECTIVE ORDER DEPARTMENT OF THE ARMY, 23 24 Defendant. 25 CITY OF SAN BERNARDINO MUNICIPAL 26 WATER DEPARTMENT. 27 Plaintiff, 28

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1	vs. )
2	UNITED STATES OF AMERICA, ) DEPARTMENT OF THE ARMY, and )
3	DOES 1 ~ 100, inclusive.
4	Defendants.
5	
6	Pursuant to Fed. R. Civ. P. 26(c) and Local Rule 14.8 of the
7	United States District Court for the Central District of
8	California, the Parties, through their undersigned counsel, agree
9	and stipulate as follows:
10	I. <u>Definitions</u>
11	For purposes of this stipulation,
12	1. "Parties" refers to the Defendant United States of
13	America Department of the Army ("Army") and Plaintiffs State of
14	California ("State") and City of San Bernardino Municipal Water
15	Department ("City") collectively.
16	2. "Rosters" refers to unit rosters and payrolls provided
17	to the Plaintiffs which contain the names and service numbers of
18	Army personnel who, to the extent that the Army can determine,
19	may have served at the location known in this litigation as Camp
20	Ono, California, during the period from 1942 to 1947 during World
21	War Two, Bates numbers US 4117 through US 5167.
22	3. "VA" refers to the Department of Veterans Affairs, and,
23	where, appropriate, its predecessor, the "Veterans
24	Administration", an agency of the United States government.
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4. "VBA" refers to the Veterans Benefits Administration, a
 component of the Department of Veterans Affairs, that administers and their dependents.

II. <u>Facts</u>

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5 5. The City and the State seek the last known addresses or 6 telephone numbers of the individuals identified in the Rosters 7 ("Locating Information") because these individuals may possess 8 information relevant to this litigation regarding contamination 9 of the City's water supply, which the City and the State allege 10 was caused by the Army.

6. The Army has objected to disclosing the Locating
Information on the ground that it is contained in records
protected by the Privacy Act, 5 U.S. C. § 552a. The City and the
State disagree with this position.

15 7. The VBA may possess last known addresses for individuals 16 listed on the Rosters who have applied for VA benefits in 17 computerized records which may be retrieved by the names of the 18 individuals, or by some other identifying numbers unique to each 19 individual beneficiary.

8. To the extent that the VBA has such last known
addresses, it obtained and maintains that information in order to
deliver benefits to the named individuals.

9. The VBA does not maintain individual beneficiary telephone numbers in its automated beneficiary data bases and could only find such information by having VA employees nationwide determine where each individual beneficiary's paper - 3 - 1 benefit claim folder is located, directing VBA employees at each C1 LL of those facilities to retrieve the paper benefit claim folder 2 for each individual beneficiary, and searching each paper benefit 3 claim file by hand for such information. VA employees then would to 4 have to write down the telephone numbers, collate them and key 51 them into an electronic format for delivery to the parties. Such 6 actions would be costly, time-consuming and a significant strain 7 on VA's limited resources. 8

9 10. The City has created computer disks containing over 10 9000 names and service numbers of Army personnel derived from the 11 rosters, using the format specified by the VBA so that the VBA 12 can use its computerized system to compare the data on the disks 13 with its automated benefits records systems.

14 11. The Court may enter an order pursuant to 5 U.S.C. §
15 552a(b)(11) and 38 U.S.C. § 5701(b)(2) directing the VBA to
16 provide the Parties with the last known addresses, to the extent
17 that VBA can locate such information after a good faith search,
18 without first obtaining the prior written consent of the
19 individuals to whom such records pertain.

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#### III. <u>Stipulation</u>

21 12. Using the data on the disks provided by the City, and 22 pursuant to an order entered by the Court in this matter, the VBA 23 shall search its automated records for the last known addresses 24 of the individuals on the Rosters, and, to the extent that the 25 VBA is able to locate last known addresses after a reasonable, 26 good faith search for such information, shall disclose those

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addresses within thirty days of the date that the Order contained 1 🕷 ្រ ប្រ 2 herein is filed to the Parties on computer disks in the same format as the City used when providing disks to the VBA, together 3 <u>65</u> 4 with a paper copy of the information. The disks identified 5 herein shall be marked "PROTECTED INFORMATION-DISCLOSE ONLY IN ACCORDANCE WITH THE PROTECTIVE ORDER ISSUED BY THE COURT IN C.D. 6 CAL. CASE NO. CV 96-5205 MRP" and upon retrieval or printout of 7 the data from the disks, the same phrase shall appear on all 8 copies of the disks or of printouts of the disks. 9

10 13. VBA shall not be compelled to produce information that 11 was obtained pursuant to and is protected by 26 U.S.C. § 6103.

14. The Parties will split into three equal parts the list 12 13 of names for whom the VBA can locate addresses. Within thirty days of receipt of the address list, each Party shall complete 14 its search of its share of the list for the applicable phone 15 numbers using public databases, and shall disclose the results of 16 17 its search to the other parties within one week of completion. The phone numbers located from public sources shall not be 18 19 subject to this protective order.

20 The information delivered to the Parties by VBA may be 15. used only in direct connection with investigating the subject 21 22 matter of this case, in interviewing witnesses, in locating 23 persons with knowledge of the facts in this case, in taking 24 depositions, in communicating with the United States 25 Environmental Protection Agency, and in presenting testimony or 26 motions to the Court. If it becomes necessary to file the list 27

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1 or computer disks with the Court, such lists or disks shall be 2 filed under seal until and unless the Court directs otherwise.

Because of the Privacy Act provisions governing the use  $\overline{\xi_{\zeta}}$ 3 16. of information gathered from the automated comparison of Federal 4 agency automated Privacy Act-protected records with the automated 5 records of state and local governments, 5 U.S.C. §§ 552(a)(8), 6 (o), (p), (r) and (u), Plaintiffs will not use the names and last 7 known addresses provided by the VBA in making any determination 8 whether or not the individuals named in the Rosters are eligible 9 for any federal benefit program. 10

Except as otherwise ordered by the Court, within thirty 17. 11 days after the conclusion of this litigation, all computer disks 12 provided by the VA to the Parties, and all copies of those disks 13 or printouts made from those disks or copies of those disks shall 14 be destroyed. For purposes of this paragraph, conclusions of 15 this litigation is defined as voluntary settlement, a dismissal 16 with prejudice, or a decision on the merits that has become non-17 appealable. 18

19 18. Any Court Order entered pursuant to this stipulation 20 will remain in effect and apply to all computer disks provided by 21 the VA to the Parties, and to all copies of those disks or 22 printouts made from those disks (or copies of those disks) that 23 \\

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1	remain in the possession of any Party if this case is dismissed										
2	without prejudice.										
3			Respectfully submitted,								
4											
5	Date:	December 3, 1997	SYLVIA QUAST								
6			U.S. Department of Justice Environment and Natural Resources								
7			Division Environmental Defense Section								
8			P.O. Box 23986 Washington, D.C. 20026-3986								
9			Attorney for the Army								
10											
11											
12	Date:		ANN RUSHTON								
13 14			Deputy Attorney General California Department of Justice 300 South Spring Street Suite 5000								
15			Los Angeles, CA 90013								
16			Attorney for the State of California								
17			MOIN								
18	Date:	December 4 1997	RUSSELL RANDLE								
19			Patton Boggs, L.L.P. 2550 M Street N.W.								
20			Washington, D.C. 20037								
21	Date:										
22			THOMAS N. JACOBSON Gresham, Savage, Nolan & Tilden								
23			600 N. Arrowhead Ave. Suite 300								
24			San Bernardino, CA 92401								
25			Attorneys for City of San Bernardino Municipal Water								
26			Department								
27											
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ORDER

Having reviewed the foregoing Stipulation and there being 2 good cause shown therefor, 3

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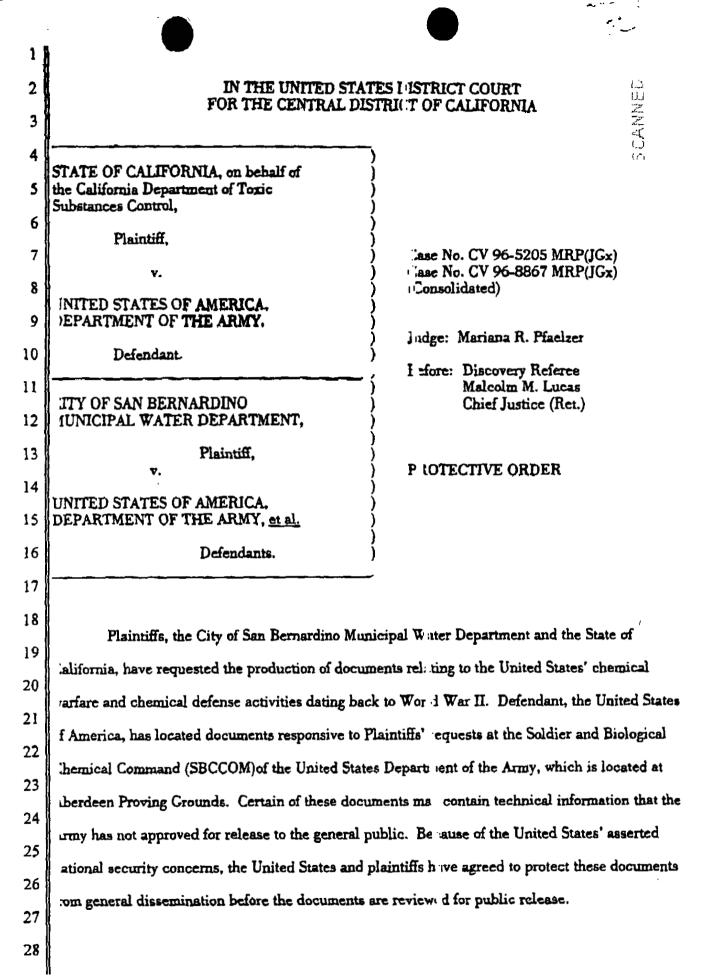
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DATE :

SCANNED IT IS ORDERED THAT the Veterans Benefits Administration 4 shall search its automated benefit claim records for the last 5 known addresses of the individuals named in the Rosters in 6 accordance with the above Stipulation between the Parties, and to 7 the extent that the VBA is able to locate such addresses in its 8 automated benefit claim records after a reasonable good faith 9 search thereof, shall disclose such information to the parties 10 under the terms and conditions specified in the above 11 12 Stipulation.

IT IS FURTHER ORDERED THAT the parties to this litigation 13 shall maintain, use and disclose such information subject to the 14 above Stipulation only in accordance with the terms of such 15 Stipulation. If a party wishes to otherwise use or disclose such 16 information, that party must first obtain an order of this Court 17 permitting such use or disclosure. Such order may be entered 18 only upon notice to all parties and the VA, and, if requested by 19 any party or the VA, a hearing. 20

United States District Court Judge



Therefore, in order to expedite the production if such records consistent with the United
 States' claimed security concerns, and with the consent of the parties, pursuant to Federal Rule of
 Civil Procedure 26(c) the Discovery Referee orders that the Plaintiffs' review and use of any
 SBCCOM documents that have not been reviewed for public release that are produced by the United
 States be governed by the following conditions:

6 This Order shall apply to documents from SBCCOM that have not yet been reviewed (1)7 for public release. This Order will refer to these documents as "covered documents." Documents that have been cleared for public release are subject to no restriction under this Protective Order 8 and are not "covered documents." To the extent that the Lity or State believe that documents 9 initially deemed "covered documents" duplicate information that is already publicly available or 10 11 are not technical data or are otherwise not subject to 32 C.F.R. Part 250 and should not to be considered "covered documents", the City and/or the State will provide a list of such documents 12 13 to the United States after the City or State have had an opportunity to review such documents, and may periodically update such list. The United State: shall have forty-five (45) days from 14 receipt of such a list to concur or disagree with such a proposed listing. The United States 15 reserves the right to request additional time to complete its review of such documents for good 16 cause. Documents that have been reviewed and determined to require an export license for 17 disclosure are not "covered documents" but are subject to the restrictions set forth in 32 C.F.R. 18 Part 250; the Arms Export Control Act, 22 U.S.C. § 2751, c: seq.; and 50 U.S.C. App. 2410, et seq. 19

- (2) All covered documents produced pursuant to this order will contain a stamp which
  indicates that they are subject to a protective order, but the stamp will not stay that the documents
  are subject to export control laws unless and until the relevant official(s) make such a determination
  and relay it to the Plaintiffs in writing.
- 24 (3) Defendant will provide the covered documen : to Plaintiffs' attorneys on the
  25 following schedule: one-third of the documents will be produced to the plaintiffs by June 7, 1999,
  26 and second third of the documents will be provided to the plaintiffs by June 14, and the final third of
  27 the documents will be provided to the plaintiffs by June 21, o alternatively, defendant will allow the
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access to copy the documents onsi e no later than June 7, 1999, with sufficient 1 plaintiffs reasonary 2 equipment and personnel to allow the completion of copying by June 22. Until any covered 3 document has been reviewed for release, Plaintiffs' attorneys are authorized to disclose the covered 4 documents only to those persons with American citizenship who are required to use covered  $\bigcup_{i=1}^{i_i}$ 5 documents to assist Plaintiffs' in preparing their cases fo trial, or in conjunction with this litigation, 6 withe exceptions noted in paragraph 8 below. Plaintiffs' attorneys must keep a list of the names of 7 all persons who are provided access to covered documen 3. This list will be periodically filed under 8 seal with Chief Justice Lucas, and released to the United States only upon a showing of good cause.

9 (4) Plaintiffs' attorneys and agents are permit ed to use covered documents only in 10 conjunction with this litigation and remedial work done by EPA, and discussions about the remedial 11 work and the litigation with members of Congress, Senator 1, and their staffs. Plaintiffs' attorneys and 12 agents are prohibited from using covered documents for at y other purpose, including other litigation 13 and personal use, with the exceptions noted in paragraph { below.

14 (5) Plaintiffs' attorneys and agents are permitted to discuss the contents of covered 15 documents only in conjunction with this litigation and only to the extent it is necessary to prepare 16 Plaintiffs' cases for trial, with the exceptions noted in paragraph 8 below. Activities considered to be 17 in conjunction with this litigation include, but are not limited to: trial preparation, interviewing 18 potential factual and expert witnesses, preparing factual and expert witnesses, deposing factual and 19 expert witnesses, and motions and other documents filed with the Court and the Discovery Referee 20 in accordance with Paragraph 10, below.

(6) Plaintiffs' attorneys and agents are prohibited from releasing any covered documents
to or discussing the contents of covered documents with any person or organization (other than
potential witnesses noted in paragraph 5 above that are Ame ican citizens) who is not assisting
Plaintiffs' attorneys and agents in conjunction with this litiga ion and preparing Plaintiffs' cases for
trial, including the press, with the exceptions noted in paragraph 8, below.

(7) Plaintiffs' attorneys and agents are authorized to reproduce covered documents only
 to the extent reproduction is necessary for Plaintiffs in conjunction with this litigation. Plaintiffs are
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not permitted to release covered documents to outside companies for reproduction, unless approved,
in writing, by the United States, which approval will not be unreasonably withheld or delayed? Any
copy of a covered document is to be governed by the terms of this Order. The United States agrees
that the City and/or State may hire a copy service to make the initial copies of the documents on site,
provided that the copy service and its equipment is approved by the applicable SBCCOM document
custodian, which approval shall not be unreasonably delayed or withheld in light of the June 30,
1999, deadline for the completion of factual discovery.

8 (8) Pursuant to 32 C.F.R. § 250.4, Plaintiffs nay have unimpeded discussions with any
9 Members of Congress, any Senators, and their respective staffs, and may submit covered documents
10 as well as documents determined to require an expert license for disclosure as provided in paragraph
9 (b) below, to these elected officials and their staffs with notice of the documents' protected status.
12 Plaintiffs also have the right to submit covered documents as well as documents determined to
13 require an expert license for disclosure as provided in paragraph 9(b) below, with notice of the
14 documents' protected status, to the U.S. Environmental Protection Agency.

15 In addition to the procedure provided in puragraph 1, above, concerning (9) determination as to which documents contain publicly available information or are not technical 16 data or are otherwise not subject to 32 C.F.R. Part 250, a any time during this litigation or 17 during the course of EPA's remedial work Plaintiffs believe it is necessary to release any covered 18 document to the general pubic or believes that it is necessary to exempt any covered document 19 from this protective order, Plaintiffs shall request the United States to conduct a security review. 20 The United States will review the document and determin : whether the document requires an 21 22 export license for disclosure. The United States shall have thirty (30) days to conduct this security review. The United States reserves the right to request additional time to complete its 23 24 review of such documents for good cause.

25 26 (A) If the United States determines that any document may be released to the general public, this Order shall no longer apply to the a document and the United States will

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1		provide written authority for Plaintiffs to mark the document to indicate taht it is no
2		longer covered by the Protective Order.
3	(B)	If the United States determines that any locument contains technical data for
4		military critical technologies that require $s$ an export license for disclosure , then the
5		United States shall affix the appropriate marking to the document and provide it to
6		the Plaintiffs pursuant to 32 C.F.R. § 250.4, and this Order shall no longer apply.
7		Plaintiffs use of any such documents shal! be governed by 32 C.F.R. Part 250; the
8		Arms Export Control Act, 22 U.S.C. § 27.11, et seq.; and/or 50 U.S.C. App. 2410, et
9		seq. The plaintiffs retain the right to contest, before the Discovery Referee and/or
10		the District Court, as appropriate, any determination made by the United States that a
11		specific document or a general type of document contains technical data about
12		militarily critical technologies and require an export license for disclosure.
13		Plaintiffs expressly reserve their right to contest any determination that documents
14		related to the M-1 HC smoke pot, M-4 HC moke pot, and M-8 HC smoke grenade,
15		and decontaminating agent, non-corrosive DANC), as those items were designed,
16		manufactured, and used before and during World War II and up to 1948 are
17		"technical data" related to "militarily critic al technologies" as those terms are used
18		under 32 C.F.R. part 250, 10 U.S.C. § 130 22 U.S.C. § 2751, et. seq., and 50
19		U.S.C. App. § 2401 et. seq., and their implimenting regulations.
20	(10)	If Plaintiffs believe it is necessary to file an covered document with the Court or the
21	Discovery Ref	eree, Plaintiffs shall file the documents under seal.
22	(11)	Plaintiffs shall also file all exhibits to depossions consisting of covered documents
23	under seal. T	he United States shall have forty-five (45) day after the date of the deposition to
24	conduct a secu	urity review of the documents to determine whether they are subject to export control
25	protections.	The United States reserves the right to reque: t additional time to complete its
26	review of suc	h documents for good cause.
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1	(12) Ar me conclusion of this litigation, Plair iffs must return any covered documents,
2	documents that have been reviewed and determined tr require an export license for disclosure,
3	and any copies of such documents, excluding those filed with the Court or Discovery Referee under
4	seal, to the United States. At the conclusion of this litig: tion any copies filed with the Discovery
5	Referee under seal will also be returned to the United States. Plaintiffs' attorneys will be required to
6	certify that all covered documents and copies thereof have been returned to the United States.
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8	It is so ORDERED.
9	On this day of June, 1999.
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12	Hon. Malcolm M. Lucas Chief Justice (Retired)
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**Counsel for United States** 

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SCANNED



BILL LOCKYER, Attorney General of the State of Ce ifornia

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