STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401

MONITORING AND REPORTING PROGRAM NO. R3-2004-0117 FOR DISCHARGERS

ENROLLED UNDER CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS

This Monitoring and Reporting Program describes monitoring and reporting requirements for all dischargers enrolled under *Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands, Order No. R3-2004-0117.*

Part I. Monitoring Requirements. Each discharger must elect a monitoring option when filing a Notice of Intent. Part I, Option 1, below, describes requirements for those who choose to participate in the Cooperative Monitoring Program. Part I, Option 2, below, describes requirements for those who elect individual monitoring. Any discharger who has not identified and met the enrollment requirements of the cooperative monitoring program, must commence individual monitoring. Any discharger who has not elected either individual or cooperative monitoring is in violation of the conditions of this waiver. Dischargers may change monitoring options by filing a revised Notice of Intent.

Part II. Reporting Requirements. Each discharger is required to provide information to the Regional Water Quality Control Board (Regional Board) on farm plan and education completion, and management practice implementation. Part II describes reporting requirements for Tier 1 (Five Year) Conditional Waiver holders and for Tier 2 (One Year) Conditional Waiver holders.

Part III. Monitoring Report Requirements. Monitoring data collected in accordance with a Quality Assurance Project Plan must be submitted in accordance with the provisions described in Part III.

PART I. MONITORING REQUIREMENTS

OPTION 1. REQUIREMENTS FOR COOPERATIVE MONITORING

Cooperative monitoring represents a watershed-based approach to meeting monitoring requirements. Fifty sites will be selected throughout the agricultural areas of the region, on main stems of rivers and on tributaries entering the rivers. These sites will be monitored on a regular basis, to see whether implementation of management practices as the result of adoption of the waiver is improving water quality. Sites will be selected in areas where the Regional Board's Central Coast Ambient Monitoring Program and other data have identified water quality problems from nutrients and other constituents that are likely attributable to irrigated agriculture.

The Cooperative Monitoring Program allows dischargers to pool resources in order to accomplish required monitoring at a lower cost than individual monitoring.

Dischargers that elect the "Cooperative Monitoring" option on their Notice of Intent to enroll are subject to the following requirements:

Dischargers participating in the cooperative monitoring option shall contribute to a cooperative monitoring program designed to determine whether water quality and associated beneficial uses are protected and/or improved as a result of the Conditional Waiver. Regional Board staff is directed to work with the agricultural industry to identify an organization or other entity suitable to conduct the Cooperative Monitoring Program according to the timeline adopted in the Waiver Order. The Cooperative Monitoring Program will submit names of participating dischargers to the Regional Board; this submittal and the dischargers' continued full participation in the Cooperative Monitoring Program will satisfy water quality monitoring requirements for those participants. The entity will develop a dues schedule or other mechanism for addressing costs of implementing the cooperative program described below. The entity may apply for grant funds and investigate other sources of funding to reduce costs to dischargers. The Cooperative Monitoring Program will notify the Regional Board of any enrolled dischargers who cease to comply with dues schedules or other enrollment requirements; such dischargers will be considered out of compliance with the conditions of the waiver unless they begin individual monitoring immediately. The Cooperative Monitoring Program will develop and submit a Quality Assurance Program Plan and monitoring plan to the Regional Board's quality assurance officer for approval prior to initiation of monitoring. Approval may take up to three months, so submittal must be well in advance of the planned start of monitoring. In cooperation with landowners and affected irrigated agricultural operations, the Non-Profit Entity will begin focused monitoring programs in two areas of known water quality impairment, the Salinas River (including Moro Coho, Tembladero, Elkhorn Slough) in North Monterey County and the Santa Maria River in Santa Barbara County (including Oso Flaco Creek). Monitoring, to be conducted by the Cooperative Monitoring Program directly or through contracts, must commence on **January 1, 2005** in the Salinas and Santa Maria areas. Monitoring throughout all specified water bodies must begin by **January 1, 2006**.

Broad objectives of the Cooperative Monitoring Program shall be to:

Short Term Objectives

- Assess status of water quality and associated beneficial uses in agricultural areas
- Identify problem areas associated with agricultural activities, where Basin Plan objectives are not met or where beneficial uses are impaired
- Conduct focused monitoring to further characterize problem areas and to better understand sources of impairment.
- Provide feedback to growers in problem areas

Long Term Objective

- Track changes in water quality and beneficial use support over time.

Beneficial Uses

Most of the major creeks and rivers of the Central Coast have designated beneficial uses that include cold and warm water fish habitat, agriculture, wildlife habitat, commercial and

recreational fishing, and municipal and domestic supply. Other beneficial uses may also apply. Waterbodies which are not specifically identified in the Basin Plan also have designated beneficial uses, including municipal and domestic supply, recreation, and aquatic life (either for cold or warm water, whichever is applicable).

Impairment to beneficial uses in surface waters may result from conditions including nitrate concentrations which exceed the drinking water standard, toxic chemicals which exceed levels which are safe for human consumption or which cause toxicity or alterations in aquatic community structure, excessive buildup of salts to levels which create problems for irrigation and other uses, low dissolved oxygen levels which are harmful to aquatic life, and algal growth which may cause nuisance or otherwise impair beneficial uses. Some of these impairments are readily assessed through exceedance of numeric criteria. Others are assessed through narrative criteria (e.g. causing nuisance); in these cases a "weight of evidence" approach is employed, where multiple measures of impairment are utilized to determine if narrative objectives are met.

Cooperative Monitoring Program Approach

The focus of the Cooperative Monitoring Program will be on beneficial use protection and waterbody health as opposed to individual discharge (effluent) monitoring. The specific monitoring program must support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions. In developing monitoring program requirements, the Regional Board has considered the volume, duration, frequency, and constituents of the discharge, the extent and type of existing monitoring activities, including, but not limited to, existing watershed-based, compliance, and effectiveness monitoring efforts. To support the waiver program, the cooperative monitoring effort must be able to detect long-term trends over time, assess areas where water quality standards and beneficial uses are not being supported, and conduct follow-up monitoring to better characterize problem areas. In order to accomplish this, the Cooperative Monitoring Program should be structured as a unified approach conducted by a single entity. This approach will ensure that information used for decision-making is of the highest quality, will result in efficiency of data management, and will be cost-effective.

The total budget for the Cooperative Monitoring Program shall make provision for sampling a core network of 50 sites, an additional 25% for follow-up investigative monitoring in problem areas, and the necessary staff and administrative costs to maintain the program. The cooperative program shall be responsible for collecting dues and meeting monitoring and reporting requirements. Although the Cooperative Monitoring Program may set individual grower costs based on any method it chooses, including consideration of administrative, staffing and laboratory costs, the Regional Board recommends a cost structure that sets dues in consideration of number of irrigated acres and type of discharge. Regional Board staff has developed budgeting tools for use by the cooperative program in estimating costs. Estimates assumed 2000 enrollees, using data from the Agricultural Census to estimate acreage breakdown, and cost information from several private and university laboratories to estimate analytical costs. Type of discharge, size of operation and potential impact to water quality were considered in developing a proposed cost structure.

Funding Mechanisms For Cooperative Monitoring

To initiate the monitoring program, the Cooperative Monitoring Program may make use of available settlement funds in two areas (the lower Salinas River watershed and the Santa Maria River watershed) which have severe water quality problems associated with irrigated agriculture. Additionally, the Agricultural Water Quality Grants program and other grant funding opportunities should be explored to further reduce costs during the start-up period.

Funds for the Cooperative Monitoring Program should be collected and managed by an entity (nonprofit organization or other suitable group) designated by the agricultural industry and acceptable to the Regional Board. The entity must plan for sufficient funds to implement the program as described. The entity may conduct the monitoring as specified by the approved Quality Assurance Program Plan, or may contract out the monitoring to qualified consultants. The entity may also elect to work with Regional Board staff to have some or all of the monitoring conducted through CCAMP. In this latter approach, the entity would hire sampling staff and pay laboratory costs, but the sampling effort, data management and quality assurance would be conducted under the supervision of CCAMP staff. This approach could potentially reduce overall costs, because it would make use of electronic data uptake, quality assurance, and management tools already developed for the CCAMP program.

Monitoring Site Network

Waterbodies listed in Table 1 shall be included in an initial core monitoring network of 50 sites. Several criteria have been used to identify waterbodies to be included in the core monitoring network. These include 1) waterbodies which are on the 303(d) list of impaired waterbodies for pollutants associated with agricultural applications, 2) waterbodies which have evidence of serious nitrate groundwater contamination in areas associated with intensive agricultural activity (CCRWQCB, 1995[1]), 3) and waterbodies which have been documented with beneficial use impairment from pollutants associated with agricultural activities, and which are proposed for future listing on the 303(d) list.

Sites should be located along the main stem and at the lower ends of tributaries in areas associated with agricultural activity. In some cases more than one site may be located on tributaries, in order to better isolate agriculturally-sourced inputs from those from other land uses. Sites should initially be selected from the suite of existing CCAMP monitoring sites, which already have at least one year of monthly monitoring data available, in order to maximize the usefulness of data in detecting trends. Sites may be added or changed to best characterize potential agricultural impacts, if the entity, in consultation with Regional Board staff, demonstrates that these sites are most appropriate. Site locations may be modified based on input from the agricultural industry, other Regional Board programs, or monitoring data that reveals emerging problems. Safe, all-weather access at public access points is desirable.

[1] 1995. Assessment of Nitrate Contamination in Ground Water Basins of the Central Coast Region. California Regional Water Quality Control Board, Central Coast Region.

Table 1. Waterbodies to be initially included in the core monitoring network

Hydrologic SubArea	WaterBody Name
30510	Harkins Slough
30510	Pajaro River
30510	Salsipuedes Creek
30510	Watsonville Slough
30530	Llagas Creek
30530	Tesquisquita Slough
30530	Millerton Canal
30600	Moro Cojo Slough
30910	Blanco Drain
30910	Old Salinas River
30910	Salinas River (below Chualar)
30910	Tembladero Slough
30920	Alisal Creek
30920	Chualar Creek
30920	Gabilan Creek
30920	Natividad Creek
30920	Quail Creek
30920	Salinas Reclamation Canal
30920	Espinosa Slough

Hydrologic SubArea	WaterBody Name
31022	Chorro Creek
31023	Los Osos Creek
31023	Warden Creek
31024	Perfumo Creek
31024	San Luis Obispo Creek
31031	Arroyo Grande Creek
31031	Los Berros Creek
31210	Bradley Canyon Creek
31210	Main Street Canal
31210	Orcutt Solomon Creek
31210	Oso Flaco Creek
31210	Little Oso Flaco Creek
31210	Santa Maria River
31410	Santa Ynez River
31531	Bell Creek
31531	Glenn Annie Creek
31534	Arroyo Paredon Creek
31534	Franklin Creek

Monitoring Constituents and Frequency

The core monitoring program will include sampling of conventional water quality parameters and flow, toxicity testing in water and sediment, and evaluation of benthic invertebrate condition. Constituents and frequency are listed in Table 2 and described below.

Conventional Water Quality and Flow Monitoring - Conventional water quality monitoring shall be used to assess the concentrations, loads, and sources of nutrients in agricultural areas and to evaluate their impact on beneficial uses and the performance of management practices. Monitoring data shall be compared to existing numeric and narrative water quality objectives.

Core monitoring sites shall be sampled monthly for nitrate, total ammonia, orthophosphate, chlorophyll *a*, dissolved oxygen, temperature, pH, total dissolved solids, turbidity, and flow (or at a minimum, stage data). Staff gages shall be installed wherever possible to facilitate estimation of flow. Conventional water quality data will be evaluated on a regular basis to determine whether sites have problems, or if improvements are being detected.

Toxicity Testing and Assessment of Benthic Invertebrates - Toxicity testing and assessment of benthic invertebrates shall be used to determine if applied pesticides and other constituents are impacting beneficial uses. Because of the diversity of pesticides applied and the unknown synergistic or additive effects between various chemicals, and because laboratory methods to detect these chemicals are in some cases not readily available, impacts of toxic chemicals will be initially assessed using toxicity testing and bioassessment of benthic invertebrate communities. More detailed characterization, involving additional toxicity testing, chemical analysis, analysis of pesticide application data, and/or toxicity identification evaluations, will be required as necessary in areas where toxicity problems are documented.

Core monitoring sites shall be sampled for water toxicity twice during the rainy season (October 15 – March 15) and twice during the dry season (May 15 – October 15). Rainy season sampling shall be conducted during or shortly after river runoff events, preferably including the first event that results in significant flow increase. Sediment toxicity shall be sampled once per year, in spring. Rapid bioassessment for benthic invertebrate assemblages shall be conducted concurrently with spring sediment sampling. All sampling methodologies shall be consistent with the CCAMP monitoring approach and the Surface Water Ambient Monitoring Program Quality Assurance Program Plan.

Table 2

Constituent	Units	Sample Type	Reporting Limit	Minimum Frequency of Sampling and Analysis
Nitrate as N	mg/L	Grab	0.1 mg/L	Monthly
Total ammonia	mg/L	"	0.1 mg/L	"
Orthophosphate as P	mg/L	"	0.01 mg/L	"
Chlorophyll a	ug/L	"	1.0 ug/L	"
Dissolved oxygen	mg/L	"		"
Temperature	°C	"		"
Total dissolved solids	mg/L	"	10 mg/L	"
pH	pH Units	"		"
Turbidity	NTUs	"	0.5 NTU	"
Flow	CFS			"
Water toxicity[2] *Ceriodaphnia dubia* (U.S. EPA Method 1002.0 7-day chronic survival and reproduction test) *Pimephales promelas* (U.S. EPA Method 1001.0 7-day chronic larval survival and growth test) *Selenastrum capricornutum* (U.S. EPA (Method 1003.0) 96-hour growth)				Twice during wet season (Oct 15-March 15) and twice during dry season (May 15- Oct 15)
Sediment toxicity[3] *Hyalella azteca* (10-day survival and growth test)		Composite		Spring (March 1 – April 30)
Benthic invertebrate assessment[4]		California Rapid		Spring (March 1 – April 30), concurrent

[2] USEPA. 2002. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition. Office of Water, Washington, D.C. EPA-821-R-02-013.
[3] USEPA. 1994. Methods for Measuring the Toxicity and Bioaccumulation of Sediment-Associated Contaminants with Freshwater Invertebrates. Office of Research and Development, Washington, D.C.
[4] California Aqualic Bioassessment Laboratory, 2003. California Stream Bioassessment Procedure. Water Pollution Control Laboratory, California Department of Fish and Game.

		Bioassessment Protocols		with sediment sampling

Follow-up monitoring in problem areas should be conducted in a way to improve understanding of the nature and source of the problem. The intent of follow-up monitoring during the first cycle of the waiver program is to increase understanding of the areal scope, sources, and severity of the problem such that better feedback can be provided to growers related to management practice implementation. Specific questions of concern and study designs to answer these questions will be developed for any follow-up monitoring. Because forensic chemistry and other analytic approaches can rapidly increase program costs, problem areas will be prioritized relative to severity of problem, availability of other data sources to inform decision-making, and other considerations. When an individual operation is identified by follow-up monitoring as the source of a problem, the Regional Board may require additional monitoring by that individual.[5]

Quality Assurance Project Plan (QAPP)

The monitoring program must be conducted according to an approved quality assurance project plan (QAPP) that describes how data will be collected and analyzed to ensure that it is consistent with State and Regional Board monitoring programs and is of high quality. The program shall develop a QAPP that is consistent with the State's Surface Water Ambient Monitoring Program (SWAMP) QAPP and approved by the Regional Board's Quality Assurance Officer. A draft QAPP template will be available through the Regional Board's website. All sampling methodologies and data collection shall be conducted consistent with SWAMP and the Central Coast Ambient Monitoring Program (CCAMP). All laboratory analysis shall be conducted by a laboratory certified by the Department of Health Services.

The QAPP shall include a sampling plan, map of monitoring sites, site-specific information, project organization and responsibilities, description of analytical techniques, data quality objectives, data management and reporting approach, and other standard quality assurance information.

Data Reporting

Monitoring data shall be submitted to the Regional Board electronically and in hard copy. Electronic data shall be reported according to Regional Board electronic submittal guidelines, which will be available on the Regional Board website by January 1, 2005. Electronic reporting of monitoring data shall be conducted at least quarterly. Hard copy data reports shall be submitted annually.

[5] The cooperative monitoring group can agree to fund or perform this monitoring on behalf of individual dischargers.

OPTION 2. REQUIREMENTS FOR INDIVIDUAL MONITORING

Dischargers that elect the "Individual Monitoring" option on their Notice of Intent to enroll are subject to the following requirements:

Dischargers are required to monitor any discharges to surface or ground water, including discharges to streams, discharges to tailwater ponds, and stormwater runoff. Monitoring of tailwater, tile drain discharge and stormwater shall be conducted according to the schedule described below. Tailwater and tile drain waters that discharge to surface waters shall be monitored for general constituents and for toxicity twice during the irrigation season as described in Table 3. Tailwater contained in tailwater ponds shall be monitored for nitrate as described in Table 4. Stormwater is to be monitored twice annually for general constituents and toxicity during or shortly after runoff events, including the first event that results in discharge, as described in Table 5. More than one site may be necessary to adequately monitor discharges from the property. Site(s) should be identified in the Quality Assurance Program Plan.

In the event that toxicity is detected in at least two samples, the discharger shall develop and implement a plan for elimination of the toxicity or, prior to development of such a plan, conduct an evaluation to identify the source of the toxicity.

A. Tailwater and Tile Drain Discharge Monitoring

Table 3

Constituent	Units	Sample Type	Reporting Limit	Minimum Frequency of Sampling and Analysis
Nitrate as N	mg/L	Grab	0.1 mg/L	Four times per year, with two of these samples taken coincident with toxicity monitoring
Total ammonia	mg/L	"	0.1 mg/L	"
Orthophosphate as P	mg/L	"	0.01 mg/L	"
Total dissolved solids	mg/L	"	10 mg/L	"
pH	pH units	"		"
Temperature	°C	"		"
Turbidity	NTUs	"	0.5 NTU	"
Flow	CFS			"
Water toxicity[6] *Ceriodaphnia dubia* (U.S. EPA Method 1002.0 7-day chronic survival and reproduction test) *Pimephales promelas* (U.S. EPA Method 1001.0 7-day chronic larval survival and growth test) *Selenastrum capricornutum* (U.S. EPA (Method 1003.0) 96-hour growth)				Twice per year during irrigation season

[6] USEPA. 2002. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition. Office of Water, Washington, D.C. EPA-821-R-02-013.

B. Tailwater Pond

Table 4.

Constituent	Units	Sample Type	Reporting Limit	Minimum Frequency of Sampling and Analysis
Nitrate as N	mg/L	Grab	0.1 mg/L	Monthly in holding ponds

C. Stormwater Monitoring

Table 5.

Constituent	Units	Sample Type	Reporting Limit	Minimum Frequency of Sampling and Analysis
Nitrate as N	mg/L	Grab	0.1 mg/L	Twice in stormwater during wet season (Oct 15-March 15)
Total ammonia	mg/L	"	0.1 mg/L	"
pH	pH units	"		"
Temperature	°C	"		"
Orthophosphate as P	mg/L	"	0.01 mg/L	"
Total dissolved solids	mg/L	"	10 mg/L	"
Turbidity	NTUs	"	0.5 NTU	"
Water toxicity[7] *Ceriodaphnia dubia* (U.S. EPA Method 1002.0 7-day chronic survival and reproduction test) *Pimephales promelas* (U.S. EPA Method 1001.0 7-day chronic larval survival and growth test) *Selenastrum capricornutum* (U.S. EPA (Method 1003.0) 96-hour growth)				"

Quality Assurance Project Plan (QAPP)

Each discharger must have a quality assurance project plan that describes how data will be collected and analyzed to ensure that data is consistent with State and Regional Board monitoring programs and is of high quality. Dischargers shall develop a Quality Assurance Program Plan (QAPP), consistent with the State's Surface Water Ambient Monitoring Program (SWAMP) QAPP and approved by the Regional Board's Quality Assurance Officer. A draft QAPP template will be available through the Regional Board's website or upon request. All data collection shall be conducted utilizing field techniques consistent with SWAMP. All laboratory analysis shall be

[7] USEPA. 2002. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition. Office of Water, Washington, D.C. EPA-821-R-02-013.

conducted by a laboratory certified by the Department of Health Services. The QAPP will include location of sample site(s), description of analytical techniques, data quality objectives, and other standard quality assurance information.

Data Reporting
Monitoring data shall be submitted to the Regional Board electronically and in hard copy. Electronic data shall be reported according to Regional Board electronic submittal guidelines, which will be available on the Regional Board website by January 1, 2005. Electronic reporting of monitoring data shall be conducted at least quarterly. Hard copy data reports shall be submitted annually.

PART II. REPORTING REQUIREMENTS

A. TIER 1 (FIVE YEAR) WAIVERS

1. On or before January 1, 2007, submit a completed Management Practice Checklist that identifies currently implemented and planned management practices. A template for the checklist will be available from the Regional Board. Submittals may be made in hard copy format or through the Regional Board's website, at www.swrcb.ca.gov/rwqcb3. Website submittals are encouraged.

2. Maintain on-site at all times a completed farm water quality plan for the entire operation that identifies, at a minimum, appropriate management practices for:

irrigation management,
nutrient management,
pesticide management, and
erosion control.

Management practices must be designed and implemented to achieve improvements in water quality and compliance with the conditions in the Waivers and the State and Regional Board Plans and Polices. Where appropriate, the plan must identify future actions necessary to improve and protect water quality.

B. TIER 2 (ONE YEAR) WAIVERS

On or before January 1, 2006, and annually thereafter, submit an annual report identifying actions taken to complete education and plan development requirements, including certification of attendance at Regional Board approved education courses and statement of farm water quality plan completion if applicable. The annual report should:

1. Describe progress toward developing a farm water quality plan for the entire operation that identifies, at a minimum, appropriate management practices for irrigation management, nutrient management, pesticide management and erosion control. Management practices must be designed and implemented to achieve improvements in water quality and compliance with the conditions in the Waivers and the State and

Regional Board Plans and Polices. Where appropriate, the plan must identify future actions necessary to improve and protect water quality.

2. Include certification of completion of a minimum of five hours of water quality education per year toward the required fifteen hours of farm water quality training. Qualifying education includes irrigation management, nutrient management, pesticide management and erosion control. The Regional Board will maintain a list of approved courses.

3. Include a completed Management Practice Checklist that identifies currently implemented and planned management practices. A template for the checklist will be available from the Regional Board. Submittals may be made in hard copy format or through the Regional Board's website, at www.swrcb.ca.gov/rwqcb3. Website submittals are encouraged.

PART III. MONITORING REPORTING PROVISIONS

1. Water quality monitoring hard copy reports shall be submitted to the Regional Board **annually, with the first report due on January 1, 2007.** Monitoring reports shall contain all monitoring data obtained during the previous calendar year.

2. Monitoring reports may be required more frequently as deemed necessary by the Executive Officer, based on review of the NOI and other specific information.

3. Electronic data shall be reported according to Regional Board electronic submittal guidelines, which will be available on the Regional Board website by January 1, 2005. Electronic reporting of monitoring data shall be submitted quarterly, beginning **three months after start of monitoring.**

4. The results of any follow-up monitoring shall be included in electronic and hard copy monitoring reports

5. All monitoring reports shall be signed and certified in accordance with requirement of the conditional waiver order.

6. The Discharger or cooperative monitoring group shall deliver a copy of each monitoring report in the appropriate format to the Central Coast Regional Water Quality Control Board, 895 Aerovista Place, Suite 101, San Luis Obispo, CA 93401

7. The Discharger or cooperative monitoring group shall assure that records of all monitoring information are maintained and accessible for a period of at least five years from the date of the sample. This period of retention shall be extended during the course of any unresolved proceedings regarding the discharge or by the request of the Executive Officer. Records of monitoring information shall include:

    a. The date, exact place, and time of sampling or measurements;
    b. The individual(s) who performed the sampling, and/or measurements;
    c. The date(s) analyses were performed;

d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used;
f. All sampling and analytical results;
g. All monitoring equipment calibration and maintenance records.

Ordered By Bradley E. Hagerman
For Roger W. Briggs
Executive Officer

7/14/04
Date