STATE OF MISSOURI

Mel Carnalian, Governor • Stephen M. Mahfood, Director

DEPARTMENT OF NATURAL RESOURCES

- DIVISION OF ENVIRONMENTAL QUALITY -P.O. Box 176 Jefferson City, MO 65102-0176

October 2, 1998 (4)

Ms. Sharon Cotner, Project Manager Department of the Army St. Louis District, Corps of Engineers 9170 Latty Avenue Berkeley, MO 63134

RE: St. Louis Airport Site (SLAPS), St. Louis, MO

Dear Ms. Cotner:

We have enclosed the Applicable or Relevant and Appropriate Requirements (ARARs) for the referenced site. We look forward to working with the United States Army Corps of Engineers (USCOE) to insure that the substantive requirements of Missouri's Clean Water Law and Regulations are met.

If you have any questions, please contact Richard Laux at (573) 751-6982.

Sincerely,

WATER POLLUTION CONTROL PROGRAM

Philip A. Schroeder, Chief

Permits Section

PAS:ml

c: Larry Erickson, Hazardous Waste Program
Tom Siegel, St. Louis Regional Office
Jim Harris

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HAZARDIUS WASHE CHOGRAM MISSOURI DEPARTMENT OF NATURAL RESOURCES Applicable or Relevant and Appropriate Requirements (ARARs)
Discharges to Waters of the State at St. Louis Airport Site (SLAPS), St. Louis, MO.

The Missouri Department of Natural Resources' Water Pollution Control Program (WPCP) hereby establishes Applicable or Relevant and Appropriate Requirements (ARARs) for the St. Louis Airport Site.

Applicable requirements, as defined in 40 CFR 300.5, means those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or state environmental or facility siting laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance found at a CERCLA site. Only those state standards that are identified by the state in a timely manner and that are more stringent than federal requirements may be applicable. Further, relevant and appropriate requirements means those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or state environmental or facility siting laws that, while not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems, or situations sufficiently similar to those encountered at the CERCLA site that their use is well suited the particular site. Only those state standards that are identified in a timely manner are more stringent than federal requirements may be relevant and appropriate.

Missouri was granted National Pollutant Discharge Elimination System authority by the Environmental Protection Agency in 1974. The State thus has its own laws and pursuant regulations: the Missouri Clean Water Law (Chapter 644, RSMo) and the Code of State Regulations (10 CSR 20-6, 20-7, and 20-8).

The applicant has submitted a permit equivalent application with the understanding that the WPCP would develop appropriate water quality limits and requirements. The WPCP has reviewed state laws and regulations to determine the following ARARs for this site. These ARARs are attached. They are not a permit per se. However, their intent is to insure that USACE complies with the substantive requirements of Missouri's Clean Water Law and Regulations.

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (Superfund) (P.L. 96-510) as amended by The Superfund Amendments and Reauthorization Act of 1986 (P.L. 99-499) states, in part, that the State may enforce any Federal or State standard, requirement, criteria, or limitation to which the remedial action is required to conform under this Act in the United States district court for the district in which the facility is located.

These ARARs only authorize water discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; they do not apply to other regulated areas.

October 2, 1998

Effective Date

Edwin D. Knight

Director, Water Pollution Control Program

Owner: US Army Corps of Engineers, St. Louis District

Owner's Address: 9170 Latty Avenue, Berkeley, MO 63134

Operating Authority: N/A

Operating Authority's Address: N/A

Facility Name: St. Louis Airport Site (SLAPS), FUSRAP Site

Facility Address: 25 McDonnell Boulevard, St. Louis, MO 63134

Facility Description: Stormwater runoff from remediation of site. Actual flow is

dependent upon precipitation.

LEGAL DESCRIPTION

Outfall #001 - NE 4, SE 4, Sec. 6, T46N, R6E, St. Louis County

Outfall #002 - NE 4, SE 4, Sec. 6, T46N, R6E, St. Louis County

Outfall #003 - NW 4, SE 4, Sec. 5, T46N, R6E, St. Louis County

FACILITY DESCRIPTION (continued)

Dutfalls #001 - #003 - Stormwater runoff.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The USACE is authorized to discharge from outfall(s) with serial number(s) as specified in these ARARs. The final effluent limits shall become effective upon issuance and remain in effect until termination of these ARARs. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

0.475.44.48.49.555.44.5.555.4.5	1	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfalls #001-#003 (Note 1)						
Flow	MGD	*		*	once/month	24 hr. estimate
Oil and Grease	mg/L	15		10	once/month	grab***
Total Petroleum Hydrocarbons	mg/L	10		10	once/month	grab***
pH - Units	su	**		**	once/month	grab***
Chemical Oxygen Demand	mg/L	120		90	once/month	grab***
Settleable Solids	mL/L/hr	1.5		1.0	once/month	grab***
Arsenic, Total Recoverable	μg/L	100		100	once/month	grab***
Lead, Total Recoverable	μg/L	190		190	once/month	grab***
Chromium, Total Recoverable	μg/L	280		280	once/month	grab***
Uranium, Total	μg/L pCi/L	* * * * * *		* ***	once/month per event	grab***
Copper, Total Recoverable	μg/L	84		84	once/month	grab***
Radium, Total	μg/L pCi/L	*		*	once/month per event	grab*** grab***
Cadmium, Total Recoverable	μg/L	94		94	once/month	grab***
Thorium, Total	μg/L pCi/L	*		*	once/month per even <u>t</u>	grab*** grab***
Polychlorinated Biphenyls	μg/L	****		***	once/month	grab***
Gross Alpha	activity	*		*	per event	grab***
Gross Beta	activity	*		*	per event	grab***
Protactinium 231	pCi/L	*		*	per event	grab***
Actinium 227	pCi/L	*		*	per event	grab***
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE January 28, 1999.						

Radon PCi/L * * twice/year grab****

MONITORING REPORTS SHALL BE SUBMITTED SEMI-ANNUALLY: THE FIRST REPORT IS DUE 1014 28 1999 THERE SHALL

MONITORING REPORTS SHALL BE SUBMITTED SEMI-ANNUALLY; THE FIRST REPORT IS DUE July 28, 1999 THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- *** A representative grab sample shall be collected during a rainfall that results in a discharge.
- **** There shall be no release of PCB's to Waters of the State at or above the level of quantification currently defined as $0.5~\mu g/L$ or 0.5~ppb.

Note 1 - Monitoring shall be reported once per quarter for a given outfall from the time remedial activities begin until remediation is completed and all remediation sites within the drainage area(s) are stabilized (by seeding, mulching, sodding, landscaping, paving, etc.). The applicant must provide written notification to the department with their discharge monitoring report (DMR) before sampling for a given outfall may be discontinued. A description of stabilization measures taken must be included.

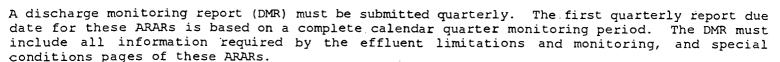
C. SPECIAL CONDITIONS

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- 1. Within 30 days of receipt of these ARARs, the USACE must place markers to identify all sampling points.
- 2. Best Management Practices (BMPs) to control erosion must be in place before beginning, and during remediation activities in a given drainage. These BMPS may include straw bales, silt fencing and any other measures needed to minimize soil erosion and meet effluent limits.
- 3. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (e) There shall be no significant human health hazard from incidental contact with the water;
 - (f) There shall be no acute toxicity to livestock or wildlife watering;
 - (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- 4. Industrial sludge shall be disposed of at a permitted solid waste disposal facility in accordance with 10 CSR 80; or if sludge is determined to be hazardous, sludge shall be disposed of at a permitted hazardous waste disposal facility in accordance with 10 CSR 25.
- 5. These ARARs may be modified and reissued to incorporate new or modified effluent limitations or other conditions if the result of a wasteload allocation study, toxicity test, or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.

D. STANDARD CONDITIONS

Reporting Requirements



When a sample cannot be collected due to insufficient rainfall report as "no discharge".

The applicant shall submit a brief written report describing implementation of BMPs at drainages currently being remediated with each DMR.

Send copies of the DMR to both the Department of Natural Resources St. Louis Regional Office and Central Office Water Pollution Control Programs.

Exceedence of Limitations

The permittee shall also provide written notification to the Water Pollution Control Program's Central Office within 24 hours if water quality data indicate limitations have been exceeded. An explanation of actions that will be taken to correct the situation must be included with a schedule for implementation.

Termination of ARARs

Termination of these ARARs requires submitting a written request for termination and a copy of a site closure letter from DNR's Hazardous Waste Program, and subsequent approval from WPCP.

Representative Sampling

- (a) Samples and measurements taken as required herein shall be representative of the nature and volume, respectively, of the monitored discharge. All samples shall be taken at the outfalls(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.
- (b) Monitoring results shall be recorded and reported on forms provided by the Department, postmarked no later than the 28th day of the month following the completed reporting period. Signed copies of these, and all other reports required herein, shall be submitted to the respective Department Regional Office, the Regional Office address is indicated in the cover letter transmitting the Applicable or Appropriate and Relevant Requirements (ARARs).

Definitions

Definitions as set forth in the Missouri Clean Water Law and Missouri Clean Water Commission Definition Regulation 10 CSR 20-2.010 shall apply to terms used herein.

Test Procedures

Test procedures for the analysis of pollutants shall be in accordance with the Missouri Clean Water Commission Effluent Regulation 10 CSR 20-7.015.

D. STANDARD CONDITIONS (continued)

Recording of Results

- (a) For each measurement or sample taken pursuant to the requirements of these ARARS, the applicant shall record the following information:
 - (i) The date, exact place, and time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed;
 - (iv) The individual(s) who performed the analyses;
 - (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.
- (b) The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- (c) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in these ARARs.

Additional Monitoring by Permittee

If the applicant monitors any pollutant at the location(s) designated herein more frequently than required using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monitoring Report Form. Such increased frequency shall also be indicated.

Records Retention

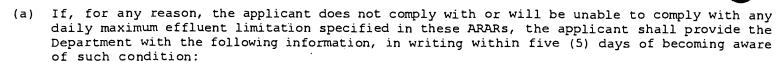
The applicant shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required, and records of all data used to complete the application for a period of at least 3 years from the date of the sample, measurement, report of application. This period may be extended by request of the Department at any time.

Change in Discharge

- (a) All discharges authorized herein shall be consistent with the terms and conditions of these ARARs. The discharge of any pollutant not authorized by herein or of any pollutant identified herein more frequently than or at a level in excess of that authorized shall constitute a violation of these ARARs.
- (b) Any facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants shall be reported by submission of a new NPDES application at least sixty (60) days before such changes, or, if they will not violate the effluent limitations specified, by notice to the Department at least thirty (30) days before such changes.

D. STANDARD CONDITIONS (continued)

Noncompliance Notification



- (i) A description of the discharge and cause of noncompliance, and
- (ii) The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.
- (b) Twenty-four hour reporting. The applicant shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time USACE becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the applicant becomes aware of the circumstances. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

Facilities Operation

The applicant shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable ARARs conditions. Operators of wastewater treatment facilities, water contaminant source or point sources, shall, upon request by the department, demonstrate that wastewater treatment equipment and facilities are effectively operated and maintained by competent personnel.

Adverse Impact

The applicant shall take all necessary steps to minimize any adverse impact to waters of the state resulting from noncompliance with any effluent limitations specified in these ARARs or set forth in the Missouri Clean Water Law and Regulations (hereinafter the Law and Regulations), including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

Bypassing

- (a) Any bypass or shut down of a wastewater treatment facility and tributary sewer system or any part of such a facility and sewer system that results in a violation of ARARs limits or conditions is prohibited except:
 - (i) Where unavoidable to prevent loss of life, personal injury, or severe property damages; and
 - (ii) Where unavoidable excessive storm drainage or runoff would catastrophically damage any facilities or processes necessary for compliance with the effluent limitations and conditions of these ARARs;
 - (iii) Where maintenance is necessary to ensure efficient operation and alternative measures have been taken to maintain effluent quality during the period of maintenance.
- (b) The applicant shall notify the department in writing of all bypasses or shut down that result in a violation of limits or conditions herein. This section does not excuse any person from any liability, unless such relief is otherwise provided by the statute.

D. STANDARD CONDITIONS (continued)

Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of **Availability of Reports**

Wastewaters shall be disposed of in a manner such as to prevent any pollutants from entering waters of the state unless permitted by the Law, and a permanent record of the date and time, volume and methods of removal and disposal of such substances shall be maintained by the applicant.

Right of Entry

For the purpose of inspecting, monitoring, or sampling the point source, water contaminant source, or wastewater treatment facility for compliance with the Clean Water law and these regulations, authorized representatives of the department, shall be allowed by the applicant, upon presentation of credentials and at reasonable times;

- (a) to enter upon premises in which a point source, water contaminant source, or wastewater treatment facility is located or in which any records are required to be kept under terms and conditions of these ARARs;
- to have access to, or copy, any records required to be kept under terms and conditions of these ARARs;
- (c) to inspect any monitoring equipment or method required;
- (d) to inspect any collection, treatment, or discharge facility covered under the ARARs; and
- (e) to sample any wastewater at any point in the collection system of treatment process.

Availability of Reports

Except for data determined to be confidential under Section 308 or the Act, and the Law and Missouri Clean Water Commission Regulation for Public Participation, Hearings and/Notice to Governmental Agencies 10 CSR 20-6.020, all reports prepared in accordance with the terms of these ARARs shall be available for public inspection at the offices of the Department. As required by statute, effluent data shall not be considered confidential. Knowingly making any false statement on any such report shall be subject to the imposition of criminal penalties as provided for in Section 204.076 of the Law.

Oil and Hazardous Substance Liability

Nothing in these ARARs shall be construed to preclude the institution of any legal action or relieve the applicant from any responsibilities, liabilities, or penalties to which the USACE is or may be subject under Section 311 of the Act, and the Law and Regulations. Oil and hazardous materials discharges must be reported in compliance with the requirements of the Federal Clean Water Act.

State Laws

Nothing in these ARARs shall be construed to preclude the institution of any legal action or relieve the applicant from any responsibilities, liabilities of penalties established pursuant to any applicable state statute or regulations.

Property Rights

The issuance of these ARARs does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of or violation of federal, state or local laws or regulations.

Toxic Pollutants

If a toxic effluent standard, prohibition, or schedule of compliance is established under so on 307(a) of the Federal Clean Water Act for a toxic pollutant in the discharge of USACE's facility and such standard is more stringent than the limitations in the ARARs, then the more stringent standard, prohibition, or schedule shall be incorporated into these ARARs as one of its conditions, upon notice to USACE.

Signatory requirement

All reports, or information submitted to the Director shall be signed (See 40 CFR-122.6).

Severability

The provisions of these ARARs are severable, and if any provision of these ARARs, or the application of any provision of these ARARs to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of these ARARs, shall not be affected thereby.