FORM EQP 5111 ATTACHMENT TEMPLATE A6
PREPAREDNESS AND PREVENTION

This document is an attachment to the Michigan Department of Environment, Great Lakes, and Energy's *Instructions for Completing Form EQP 5111, Operating License Application Form for Hazardous Waste Treatment, Storage, and Disposal Facilities.* See Form EQP 5111 for details on how to use this attachment.

The administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), R 299.9504, R 299.9508, and R 299.9606 and Title 40 of the Code of Federal Regulations (CFR) §§264.30 through 264.37 establish requirements for preparedness for and prevention of releases of hazardous wastes or constituents at hazardous waste management facilities. All references to 40 CFR citations specified herein are adopted by reference in R 299.11003.

This license application template addresses requirements for preparedness for and prevention of releases of hazardous wastes or constituents at the following hazardous waste management facility for the *Dow Michigan Operations & Salzburg Landfill facilities* in *Midland*, Michigan.

(Check as appropriate)

Applicant for Operating License for Existing Facility:

- ☒ No waiver requested
- ☐ Waiver requested for one or more units for required equipment
- ☐ Waiver requested for one or more units for required aisle space

Applicant for Operating License for New, Altered, Enlarged, or Expanded Facility:

- ☐ No waiver requested
- ☐ Waiver requested for one or more units for required equipment
- ☐ Waiver requested for one or more units for required aisle space

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INTRODUCTION

A6.A REQUIRED EQUIPMENT

[R 299.9606 and 40 CFR §264.32]

A6.A.1 Internal Communication System

[R 299.9606 and 40 CFR §264.32(a)]

Both Michigan Operations and the Salzburg Landfill facilities are equipped with internal communication or alarm systems (e.g., area alert siren, intercom system, internal telephones, and two-way radios) capable of providing immediate emergency instruction to facility personnel. The area alert siren may be used to signal a facility alert (one rise to maximum pitch), evacuation (continuous rise to maximum pitch), or all clear (two rises to maximum pitch). The intercom system, internal telephones, and the two-way radios may be used to notify plant personnel as to the nature of the emergency and recommended plan of action.

A6.A.2 Emergency Response Communication System

[R 299.9606 and 40 CFR §264.32(b)]

Both Michigan Operations and the Salzburg Landfill facilities are equipped with internal telephones and two-way radios capable of summoning emergency assistance from Dow's Emergency Services & Security department (ES&S). Dialing 1-2-3 on an internal telephone or 989-636-0123 on a non-Dow telephone and using the "help" channel or pressing the emergency call button on any Dow two-way radio puts personnel in direct contact with ES&S. If necessary, ES&S will contact the appropriate local or state authority (e.g., police, fire, etc.) for assistance.

A6.A.3 Fire, Spill, and Decontamination Equipment

[R 299.9606 and 40 CFR §264.32(c)]

Both Michigan Operations and the Salzburg Landfill facilities are equipped with fire, spill and decontamination equipment. See Attachment A7.3, Emergency Equipment Description, in Attachment XIV.A7, Contingency Plan, of this operating license reapplication for details.

A6.A.4 Adequate Water Volume

[R 299.9606 and 40 CFR §264.32(d)]

The Facility has water at adequate volume and pressure to supply water hose streams, foam-producing equipment, automatic sprinklers, or water spray systems. The Facility fire water is distributed via an underground looped fire water distribution system. The Facility fire water is taken from the Tittabawassee River with Lingle drain as a backup source.

A6.B TESTING AND MAINTENANCE OF EQUIPMENT
[R 299.9606 and 40 CFR §264.33]

Facility communication and alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where necessary, are tested and maintained to assure proper operation during an emergency. Given the long list of equipment in Attachment A7.3, Emergency Equipment Description, in Attachment XIV.A7, Contingency Plan, of this operating license reapplication, all of the testing and maintenance procedures and schedules are not listed here, but are available for inspection by the agency upon request.

A6.C ACCESS TO COMMUNICATIONS OR ALARM SYSTEM
[R 299.9606 and 40 CFR §264.34]

A6.C(1) Multiple Employees Present
[R 299.9606 and 40 CFR §264.34(a)]

Facility personnel working within the active areas of Michigan Operations or Salzburg Landfill are equipped with hand-held two-way radios, and other communication devices (e.g., telephone, intercom, and alert siren switches) which are located in easily accessible areas throughout the facilities. Workers are instructed to maintain the area surrounding the communication devices free from obstructions that would impair access to them.

A6.C(2) Single Employee Present
[R 299.9606 and 40 CFR §264.34(b)]

At no time will the Michigan Operations facility handle waste with just one employee on the premises. There are instances at the Salzburg Landfill facility when the Landfill operator will be handling waste and is the only employee on the premises. The Landfill operator is equipped with a hand-held two-way radio that is capable of summoning assistance from other operators located at the adjacent Michigan Operations facility or directly from Dow's ES&S department via a "help" channel or emergency call button located on the radio.

A6.D REQUIRED AISLE SPACE
[R 299.9606 and 40 CFR §264.35]

Sufficient space is provided within the facilities to allow for unobstructed movement of necessary personnel, fire protection equipment, spill control equipment and decontamination equipment in an emergency. For areas with fixed equipment this criteria is considered and established during design and construction. For areas storing or handling portable containers (e.g., packs, drums, roll off boxes, tank trucks, etc.), an approximately two-foot aisle is maintained between containers to ensure adequate access.

A6.E STATE AND LOCAL AUTHORITIES
[R 299.9606 and 40 CFR §264.37]

A6.E.1 Arrangements with State and Local Authorities
[R 299.9606 and 40 CFR §264.37(a)(1)]

Arrangements have been made to familiarize police, fire departments, and emergency response teams with the layout of the facilities, properties of the hazardous waste handled at the facilities and associated hazards, places where facility personnel will be working, entrances to and the roads inside the facilities and the possible evacuation routes. Arrangements have also been made to familiarize local hospitals with the properties of the hazardous waste handled at the facilities and the types of injuries and illnesses that could result from fires and explosions or releases at the facilities. Details on these arrangements are below.

Due to the complexity of the Michigan Operations and Salzburg Landfill facilities, local authorities are always escorted while on site. The escort provides information on a case-by-case basis. This information includes facility layout and chemical properties of involved materials (including hazardous waste properties). The escort determines a safe route to the involved area and escorts authorities along evacuation routes, if necessary.

Police Support

In an emergency involving these facilities, Dow could request the support of local, county, or state police in the event that:

1. The emergency had the potential to impact the local community and evacuation of such potentially affected areas was necessary.
2. People gather at critical locations on the perimeter of Dow's facility and could be potentially in danger or pose a danger by restricting access to the facility for crucial response equipment, supplies, or personnel.
3. If, due to the nature of the emergency, specialized equipment materials or supplies are needed onsite and special route clearances or traffic control is required to expedite delivery of such materials, equipment, or supplies. In this case, police and sheriff departments will provide off site evacuation of affected portions of the community, barricading, traffic control, and/or possible escort for emergency activities.

Medical Support

The Facility has a full time medical staff including full time physicians, Emergency Medical Technicians (EMTs), and a trained nursing staff. Nurses, EMTs, and physicians are onsite or available on-call for emergencies 24 hours per day, 7 days per week.

In general, the Dow Health Services Department will evaluate all injuries to personnel and visitors at Michigan Operations or Salzburg Landfill. Acute chemical exposures and minor injury cases can be treated in-house. Severe injuries or occupational illnesses that require hospitalization or treatment by specialists are treated and transported to the MidMichigan Medical Center (MMMC).

Dow staff physicians are also full-time members of the Midland Hospital staff and have admitting privileges to the MMMC. In addition, the Dow Health Services Department participates in training Dow EMTs, the Midland County Paramedics, and the Family Practice Residents in the MMMC.

Also, during practice emergency exercises, the Dow Health Services staff coordinates closely with the MMMC to monitor and treat injuries or exposures.

Finally, should evacuation of the Dow Health Services Facility be necessary, the staff would regroup and continue to coordinate medical support activities from the MMMC.

Medical Emergency Vehicles

The Michigan Operations and Salzburg Landfill, Midland locations utilize on-site ambulances for transporting injured people to the Dow Health Services Department or the MMMC. In addition, Midland County has paramedics and the MMMC has ambulances on call as needed.

Outside Fire Fighting Support

The Dow Fire Department is equipped and trained to handle all types of fires that could be associated with the hazardous waste operations of Michigan Operations and Salzburg Landfill. Outside fire support, such as the City of Midland Fire Department, would be called upon only under circumstances where Dow feels further fire fighting support is necessary and such outside fire departments are appropriately trained and equipped. Such situations could include fires that have or could spread to additional facilities within Michigan Operations or Salzburg Landfill, or fires that have or could spread to areas outside Dow property. In all cases, the decision by Dow to call in outside fire fighting support would depend upon the nature of the fire and Dow's knowledge of the capabilities and limitations of such other fire departments.

During practice emergency exercises, the Dow Fire Department works closely with the City of Midland Fire Department to monitor and evaluate fire fighting resources and responses to the practice emergency.

A6.E.2 Refusal of State or Local Authorities to Enter into Emergency Response Agreements

[R 299.9606 and 40 CFR §264.37(b)]

There have been no refusals by state or local authorities to enter into emergency response agreements.